



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**COMMUNICATING HOMELAND SECURITY THREATS:
GOVERNMENT AND PUBLIC EFFORTS**

by

Daniel A. Bailey

December 2010

Thesis Advisor:
Second Reader:

Erik Dahl
Robert Simeral

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE December 2010	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE: Communicating Homeland Security Threats: Government and Public Efforts			5. FUNDING NUMBERS	
6. AUTHOR(S) Daniel A. Bailey				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES: The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number _____.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) <p>The Department of Homeland Security (DHS) is widely criticized for poor performance, and much of its problem stems from its poor performance in public communications. DHS has not been able to earn the respect of the public and local officials, and that means that many Americans are not paying attention to important threat warnings and security based exercises. This ultimately means our homeland security is suffering and American citizens remain vulnerable to future terror attacks. This research project considers the public communication efforts of the Department of Homeland Security (DHS) by analyzing how both the Homeland Security Advisory System (HSAS) and National Exercise Program (NEP) continually fall short of effectively communicating security threats and warnings to the American public. By looking at two of its highest profile projects, HSAS and NEP, we see that the problems are largely the result of DHS taking too much of a top-down, federal approach. This thesis will argue that the highly centralized management and execution of both the HSAS and NEP fail to convey the importance of federal efforts to local levels of government and American citizens. This thesis will be a comparative case study of these two programs. I find that both programs are useful and necessary, but both can be improved by decentralizing the national exercise framework and communication efforts to local level officials who can better tailor information and response efforts pertinent to their communities. As the most important component of disaster relief and response, local level officials, who are typically overshadowed by national level personnel, can more effectively utilize federal exercise money and communicate threats the American public than DHS personnel can.</p>				
14. SUBJECT TERMS Department of Homeland Security, Public Communications, Homeland Security Advisory System, National Exercise Program			15. NUMBER OF PAGES 85	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

**COMMUNICATING HOMELAND SECURITY THREATS:
GOVERNMENT AND PUBLIC EFFORTS**

Daniel A. Bailey
Lieutenant, United States Navy
B.S., United States Naval Academy, 2003

Submitted in partial fulfillment of the
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES
(HOMELAND SECURITY AND DEFENSE)**

from the

**NAVAL POSTGRADUATE SCHOOL
December 2010**

Author: Daniel A. Bailey

Approved by: Erik Dahl
Thesis Advisor

Robert Simeral
Second Reader

Harold A. Trinkunas, PhD
Chairman, Department of National Security Affairs

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

The Department of Homeland Security (DHS) is widely criticized for poor performance, and much of its problem stems from its poor performance in public communications. DHS has not been able to earn the respect of the public and local officials, and that means that many Americans are not paying attention to important threat warnings and security based exercises. This ultimately means our homeland security is suffering and American citizens remain vulnerable to future terror attacks. This research project considers the public communication efforts of the Department of Homeland Security (DHS) by analyzing how both the Homeland Security Advisory System (HSAS) and National Exercise Program (NEP) continually fall short of effectively communicating security threats and warnings to the American public. By looking at two of its highest profile projects, HSAS and NEP, we see that the problems are largely the result of DHS taking too much of a top-down, federal approach. This thesis will argue that the highly centralized management and execution of both the HSAS and NEP fail to convey the importance of federal efforts to local levels of government and American citizens. This thesis will be a comparative case study of these two programs. I find that both programs are useful and necessary, but both can be improved by decentralizing the national exercise framework and communication efforts to local level officials who can better tailor information and response efforts pertinent to their communities. As the most important component of disaster relief and response, local level officials, who are typically overshadowed by national level personnel, can more effectively utilize federal exercise money and communicate threats the American public than DHS personnel can.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	COMMUNICATING HOMELAND SECURITY THREATS: GOVERNMENT AND PUBLIC INTERESTS.....	1
A.	MAJOR RESEARCH QUESTION.....	1
B.	IMPORTANCE OF RESEARCH EFFORTS.....	3
C.	PROBLEMS AND HYPOTHESES	5
D.	LITERATURE REVIEW	6
	1. Verbal Communications.....	6
	2. Physical Activity Communications.....	9
E.	METHODS AND SOURCES.....	11
F.	THESIS OVERVIEW	12
II.	HOMELAND SECURITY ADVISORY SYSTEM.....	15
A.	BACKGROUND AND HISTORY OF HSAS	15
B.	WEAKNESSES AND DRAWBACKS.....	22
	1. System Weaknesses.....	23
	2. System Drawbacks.....	25
C.	SOLUTIONS FOR IMPROVEMENT	29
D.	CONCLUSION	32
III.	NATIONAL EXERCISE PROGRAM	35
A.	NATIONAL LEVEL EXERCISE: 15 NATIONAL PLANNING SCENARIOS	37
B.	NATIONAL LEVEL EXERCISE: DIRECTED PARTICIPATION	45
C.	A FAILURE OF COMMUNICATION	49
D.	CONCLUSION	54
IV.	CONCLUSION: THE DEPARTMENT OF HOMELAND SECURITY AND THE FUTURE.....	55
A.	IMPROVING THE HSAS AND MAINTAINING THE NATIONAL WILL TO PROTECT AMERICA	58
B.	NATIONAL EXERCISE PROGRAM: DECENTRALIZED UNITY OF EFFORT.....	59
C.	CONCLUSION	61
	LIST OF REFERENCES	63
	INITIAL DISTRIBUTION LIST	67

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF FIGURES

Figure 1.	Homeland Security Advisory System.....	20
Figure 2.	Homeland Security Threat Advisory Threat Level Changes.....	21
Figure 3.	National Planning Scenarios	45

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1.	TOPOFF 3 Expenditure Line Items.....	41
----------	--------------------------------------	----

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

AAR	After Action Report
DHS	Department of Homeland Security
FEMA	Federal Emergency Management Administration
FOUO	For Official Use Only
HSAC	Homeland Security Advisory Council
HSAS	Homeland Security Advisory System
HSC	Homeland Security Council
HSDL	Homeland Security Digital Library
HSE	Homeland Security Enterprise
HSEEP	Homeland Security Exercise & Evaluation Program
HSGP	Homeland Security Grant Program
HSPD-3	Homeland Security Presidential Directive - 3
IG	Inspector General
LLIS	Lessons Learned Information Sharing
NDRI	National Defense Research Institute
NED	National Exercise Division
NEP	National Exercise Program
NLE	National Level Exercise
NLETS	National Law Enforcement Telecommunications System
NPS	National Planning Scenarios
OHS	Office of Homeland Security
QHSRR	Quadrennial Homeland Security Review Report
SLGCP	State and Local Government Coordination and Preparedness
TOPOFF	Top Official
WMD	Weapon of Mass Destruction

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

The interest and motivation to complete this thesis research came from a variety of classes taken as part of the Homeland Security and Defense curriculum at the Naval Postgraduate School. The further formulation of concepts and perspective regarding the Department of Homeland Security and the means with which they communicate security threats and warnings to the American public must be attributed to Dr. Erik Dahl, my primary advisor. Thank you for your support and willingness to serve as my advisor and guide me through this entire process. Your academic and personal efforts to encourage and revise my work have made me a more versatile and organized writer. Captain Simeral, USN (ret), thank you for agreeing to be my secondary reader and for your perspective on my topic. Your encouragement also contributed to my success during my time at the Naval Postgraduate School.

To my personal friends within the Homeland Security and Defense curriculum, thank for your help and assistance throughout our brief stay in Monterey. Collectively we were able to endure days of intensive writing and ultimately succeed.

To my family - you all are deserving of far more personal time than I may have been able to provide during this tour. For me, this has been a learning process in academic and family management as I have enjoyed watching my two beautiful girls, Violet and Annabelle, grow up under the care and patience of their loving mother. To my wife Sara, despite my time intensive work habits, you are the one that I rely on to keep my attention focused on the truly important things in life. Thank you for your patience, encouragement and support.

THIS PAGE INTENTIONALLY LEFT BLANK

I. COMMUNICATING HOMELAND SECURITY THREATS: GOVERNMENT AND PUBLIC INTERESTS

A. MAJOR RESEARCH QUESTION

The Department of Homeland Security (DHS) is widely criticized for poor performance, and this thesis will argue much of its problem stems from its poor performance in public communications. DHS has not been able to earn the respect of the public and local officials, and that means that many Americans are not paying attention to important threat warnings and security-based exercises. This ultimately means our homeland security is suffering and American citizens remain vulnerable to future terror attacks. This thesis will consider the public communication efforts of the DHS by analyzing how both the Homeland Security Advisory System (HSAS) and National Exercise Program (NEP) continually fall short of effectively communicating security threats and warnings to the American public. By looking at two of its highest profile projects, HSAS and NEP, I find that the problems are largely the result of DHS taking too much of a top-down, federal focused approach.

Upon the creation of the HSAS in the aftermath of 9/11, at the behest of then Homeland Secretary Tom Ridge to consolidate broad public terror alerts, the DHS sought to “reduce vulnerability or increase response capability during a period of heightened alert.”¹ The HSAS quickly developed into the most visible domestic counterterrorism tool and subsequently became the main communication link to the American public regarding security threats and warnings. The HSAS functions strictly to stimulate citizens to take recommended protective actions commensurate with color-based threat levels, but it has been widely criticized, as publicly released information relevant to actual threats remains insignificant and generalized, while more informative details remain restricted to higher level government officials.

In a similar effort to boost public communications for homeland security threats and warnings, DHS has instituted the National Exercise Program to “demonstrate that

¹ Jacob N. Shapiro and Dara K. Cohen, “Color Bind: Lessons from the Failed Homeland Security Advisory System,” *International Security*, 32 (2007): 123.

responders have the capacity to respond effectively to an incident, or identify areas in which improvement is necessary.”² National level exercises have been highly criticized for the amount of planning, coordination and resources required to simulate and evaluate emergency based tests against domestic infrastructure and organizations.

This thesis will be a comparative case study of the HSAS and National Exercise Program to answer one broad question with two underlying arguments. The question is, why has the DHS, considering all its resources and internal agencies, continually struggled to effectively communicate homeland security threats to the American public? I argue that DHS has failed to create public interest and spark citizen engagement as a result of repeatedly releasing limited and generalized threat information during crisis and periods of heightened alert. I also argue that the public has lost confidence in government efforts to provide adequate warning and protection due to the continuous stream of probing attacks against the U.S. homeland. I find that both programs are useful and necessary, but both can be improved by decentralizing the national exercise framework and communication efforts to local level officials who can better tailor information and response efforts pertinent to their communities.

This thesis argues that the highly centralized management and execution of both the HSAS and NEP fail to convey the importance of federal efforts to local levels of government and American citizens. As the most important component of disaster relief and response, local level officials, who are typically overshadowed by national level personnel, can more effectively utilize federal exercise money and communicate threats the American public than DHS personnel can. Ultimately, DHS needs to improve its public relations with both local level responders and the American public. Improved public communications and the decentralization of federally driven security efforts can be achieved by candidly communicating threat warnings and specific information during times of crisis.

² R. E. Petersen, et al., *Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress* (Ft. Belvoir: Defense Technical Information Center, 2008), 2.

B. IMPORTANCE OF RESEARCH EFFORTS

Effective communication policies are necessary to secure public opinion in efforts to continue building strong federal response capabilities and secure the homeland from future threats. The ability of the DHS to communicate with citizens and ultimately convince them to take security-related actions that are worth the economic costs and personal inconvenience is critical to crisis management efforts. A certain level of trust must accompany the authority vested in elected and politically appointed officials, however, the evidence supports a lack of trust, as only 29 percent of Americans admit they would follow evacuation orders and 27 percent claim they typically would not comply with federal instructions.³ As quoted in Michael Perini's *Public Communications*, Abraham Lincoln remarked, "Public sentiment is everything. With it, nothing can fail. Without it nothing can succeed."⁴

This analysis will demonstrate how the use of national media outlets by the Department of Homeland Security during times of crisis can be strategically valuable and advantageous in communicating security threats. Recent polling data indicate that the general public will turn to television and radio as primary sources of information during a terror attack.⁵ The failure of DHS to capitalize on accessible media outlets throughout periods of crisis is an advantage lost to the enemy. The problem with DHS public communications is that officials purposely generalize threat information upon release to the public. The lack of specificity and direction helps foster a national climate where the potential impact of threats and security concerns remains unknown. Information about emergencies and response should be honest and open, enhancing trust and interaction between governing officials and citizens.⁶ For example, during each of the six times the HSAS has ever been elevated from yellow to orange, with some heightened alerts lasting

³ Council for Excellence in Government, "Are we ready? Introducing the public readiness index: a survey-based tool to measure the preparedness of individuals, families and communities" (Washington, D.C.: 2006), 10.

⁴ Michael B. Perini, *Public Communications: Vital Link to Maintaining the Public's Trust During Crisis* (Ph.D Dissertation, U.S. Army War College, 2006), 213.

⁵ R. J. Wray, et al., *Theoretical perspectives on public communication preparedness for terrorist attacks* (Emmitsburg, MD: National Emergency Training Center, 2004), 238.

⁶ Ibid., 239.

in excess of 29 days, DHS officials initially provided vague threat information to validate the threat elevation, but failed to provide specific reasons or information relevant to threat levels receding from orange back down to yellow.

Our enemies in the war on terror continue to seek victory not through overwhelming death and destruction, but rather through influence and causing irreparable damage to the national will and public opinion of the American people. As extremist websites continue to promote “invasions of the U.S. media” and declare “media wars parallel to military wars,”⁷ U.S. government agencies charged with security must acknowledge that appropriate and meaningful communication of homeland security threats can preemptively benefit preparedness and response efforts.

In efforts to provide timely and accurate information to the public, the Quadrennial Homeland Security Review promotes the use of social networking technologies and various instant communication capabilities to promote widespread situational awareness.⁸ Utilization of cutting-edge technology and instantaneous connectivity can make it easier to spread a message or alert, but technology cannot address the more important, underlying difficulty: formulating an acceptable and actionable message for public consumption.

The importance of reviewing the National Exercise Program in assessing public communications efforts is evident in the continuous debate over the regional impact and security progress being made at a sizeable expense to the American taxpayer. In planning for 2007’s National Level Exercise, then-governor of Arizona Janet Napolitano rebutted her DHS predecessor by indicating that the estimated \$20 million exercise, which was intended to involve over 26,000 participants, was “too expensive, too protracted, and too removed from a real-world scenario.”⁹ By attempting to create all-inclusive, overarching exercises that demand multi-jurisdictional compliance and costly commitments, DHS is missing an opportunity to work with and better engage local level responders in efforts to

⁷ Michael B. Perini, *Public Communications: Vital Link to Maintaining the Public’s Trust During Crisis* (Ph.D Dissertation, U.S. Army War College, 2006), 207.

⁸ *Quadrennial homeland security review report: A strategic framework for a secure homeland* (Washington, D.C: U.S. Department of Homeland Security, 2010), 62.

⁹ Spencer S. Hsu, “Disaster drills’ future may be put to the test; National exercises could be scaled back,” (Op-Ed), *The Washington Post*, April 2, 2010, A1.

standardize equipment, procedures and capabilities. Exercising the capabilities of the nation's response forces is a visible form of communication with the American people that displays our abilities to meet and overcome homeland security-related challenges along an increasing spectrum of threat possibilities.

This research will examine the evolution of the National Exercise Program and ascertain whether the expanding costs and resources required are proportional to our national response proficiency and actual domestic security. Additionally, in order to further analyze public perception and involvement in homeland security, this research will continue beyond the evolution of the National Exercise Program and focus on the political, economic and even demographic influence in selected exercise areas around the country.

C. PROBLEMS AND HYPOTHESES

A majority of the public maintains a general lack of trust in government agencies to provide actionable warning and protection. This problem is further compounded by both the public disinterest in homeland security affairs and a public failure to seek out published government emergency resources. One recent study concluded that two out of five Americans are not sure whether or not their local government has an emergency or disaster plan for their community and nearly one-third say they do not have an emergency alert system in their community.¹⁰ Additionally, just 16 percent of adults say they have heard about Ready.gov at the national level.¹¹ This thesis argues that the problem of public distrust and disengagement can be best addressed by pushing information down to the state and local levels.

Ownership of threat information at the federal level is significant, as it centralizes power within government agencies and prevents any meaningful degree of public engagement. Various forms of evidence exist that demonstrate that during times of crisis the public retains a strong desire for threat information beneficial to response efforts at

¹⁰ Council for Excellence in Government, "Are we ready?" 7.

¹¹ Ibid., 8. (*Ready* is a national public service advertising (PSA) campaign designed to educate and empower Americans to prepare for and respond to emergencies including natural and man-made disasters. The goal of the campaign is to get the public involved and ultimately to increase the level of basic preparedness across the nation).

the lowest levels. I hypothesize that decentralizing specific threat information will further engage local responders who have the potential to make the biggest impact under emergency circumstances.

D. LITERATURE REVIEW

DHS efforts to communicate homeland security threats to the American public can be segregated into “verbal” and “physical activity” communications. Verbal communications encompass the act of alerting the public with information prior to and during times of crisis via a wide range of capabilities to include conference calls, telecommunications systems and press releases. Physical activity communications for the purposes of this research will refer to the planning and exercises conducted that visually display for the public the unified response capabilities and overall preparedness of government agencies.

1. Verbal Communications

Scholarly work by Jacob N. Shapiro, Dara Kay Cohen, Randall A. Yim, and Shawn Reese has focused on the credibility of government communication efforts and argues that vague and unspecific information continues to undermine the importance of threats to the homeland. Current research identifies a growing perception disparity relative to demographics and population density. The most densely populated areas feel that the government is appropriately allocating resources and protecting high value infrastructure, while rural communities remain skeptical of federal officials and doubt that adequate resources have been provided. Instead, rural communities have come to trust and rely on local officials over federal agencies.

Shapiro and Cohen focus on the federalized U.S. system of government and lay blame on its inability “to motivate actors to take costly protective measures.”¹² Their main assertion is predicated on the assumption that in federal systems national leaders cannot compel protective actions by setting an alert level; they must convince constituent

¹² Jacob N. Shapiro and Dara K. Cohen, “Color Bind: Lessons from the Failed Homeland Security Advisory System,” *International Security*, 32 (2007): 121.

governments and private parties that the desired actions are worth the costs.¹³ Furthermore, Shapiro and Cohen approach the public communication efforts of DHS, more specifically the Homeland Security Advisory System, from the perspective that it has been a continual failure since inception in 2002. They contend that the system has failed to generate substantial public confidence and they do not assume any public trust in government to share meaningful information.

Similarly, Reese argues that the vagueness of threat warning and alerts has undermined public confidence in government and interest in homeland security affairs. He notes, “DHS has never explained the sources and quality of intelligence upon which the threat levels were based.”¹⁴ Reese argues there are considerable financial, economic and social costs associated with threat level changes. Adjusting the threat level in conjunction with the color-coded scale has significant impact not only to the individual citizen, but also to that citizen’s family, job, and community. He says: “These costs include the increased security measures undertaken by states and localities, loss to tourism, and the indirect cost on the economy during a period of heightened threat level.”¹⁵

Yim also presents a perspective that the public’s perception of the threat can be affected by the content and method of public warning. He notes: “Without adequate threat information, the public may ignore the threat or engage in inappropriate actions, some of which may compromise rather than promote the public’s safety.”¹⁶ Yim argues that despite the resources available to DHS, the validity of the message remains the focal point. He reiterates that “public warning systems should, to the extent possible, include specific, consistent, accurate, and clear information on the threat at hand, including the

¹³ Jacob N. Shapiro and Dara K. Cohen, “Color Bind: Lessons from the Failed Homeland Security Advisory System,” *International Security*, 32 (2007): 121.

¹⁴ Shawn Reese, “Homeland Security Advisory System Possible Issues For Congressional Oversight,” *Congressional Research Service*, RL32023 (2005), 5.

¹⁵ *Ibid.*, 12.

¹⁶ R. A. Yim, *Homeland security: Risk communication principles may assist in refinement of the Homeland Security Advisory System* testimony, GAO-04-538 (Washington, D.C: U.S. General Accounting Office, 2004), 9.

nature of the threat, location, and threat time frames.”¹⁷ He claims that attempts to regionalize national level warnings and alerts can be damaging for surrounding localities desiring information necessary to determine indirect impacts and posture response forces accordingly.

Other scholars, however, offer a more positive review of the Department of Homeland Security’s efforts to communicate threats to the American public. In July 2009, upon receiving a B- from a national commission in efforts to practice greater openness of public information so that citizens better understand national threats, Janet Napolitano established the Homeland Security Advisory Task Force to assess the effectiveness of the color-coded HSAS in informing the public about terrorist threats and communicating protective measures within government and throughout the private sector.¹⁸ Despite reports that no action has been taken with regards to recommended changes for the HSAS, the Task Force reported that the HSAS has functioned reasonably well for institutions (levels of government and business), yet continues to poorly communicate a credible message to the public. Consequently, it must further be considered that the HSAS remains effective within government institutions due to the detailed and bureaucratic framework that triggers automatic response activity. Aside from recommended public actions, no unifying framework exists for state and local government echelons. Additionally, the Task Force further supports that the use of color-coded alerts is sufficiently clear, powerful, and easily understood despite a consensus against the public credibility in the HSAS.¹⁹

Despite Yim’s arguments against the credibility of government efforts and the lack of focus on the actual messages delivered, he suggests, “the specific information about the location of a threat should be provided to law enforcement agencies throughout

¹⁷R. A. Yim, *Homeland security: Risk communication principles may assist in refinement of the Homeland Security Advisory System* testimony, GAO-04-538 (Washington, D.C: U.S. General Accounting Office, 2004), 9.

¹⁸ B. Graham, and J. M. Talent, *Prevention of WMD proliferation and terrorism report card: An assessment of the U.S. government’s progress in protecting the United States from weapons of mass destruction proliferation and terrorism*, Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, 2010, 14.

¹⁹ Homeland Security Council, *Homeland Security Advisory System Task Force Report and Recommendations* (Washington, D.C.: 2009), 2.

the nation – not just to localities that are being threatened.”²⁰ He further contends that by exposing all national, state, and local entities to specific threat information, individual lower-level governments can determine through self-interest which response capabilities may need to be activated. One clear benefit to this approach, according to Yam, is the decreased cost to already strained budgets.

Some experts have argued that the use of the HSAS has successfully communicated threats to the American public. As noted above, Wray et al. (2004) compiled polling data indicating that the general public turns to television and radio as the primary sources of information in a terror attack.²¹ By capitalizing on highly visible media outlets through the simplicity of color-coded alerts, the government has succeeded in communicating a threat concern, however unsatisfied the public may become with the limited details provided.

2. Physical Activity Communications

According to the Quadrennial Homeland Security Review, exercises provide a vital tool for homeland security personnel, from the first responders to senior officials, to practice operational activities and decision-making processes in a realistic but risk-free environment.²² Improved organizational management, joint planning, and interoperability of response forces can be attributed to the value of exercises and the continual implementation of lesson learned. But despite the value of training and preparedness efforts, experts agree all-inclusive national level exercises have become socially and politically unsustainable. DHS Secretary Janet Napolitano recently declared, “the drills have grown into unrealistic, costly and over-scripted productions.”²³ She continued to further characterize exercises and drills as an “elaborate game rather than opportunities for officials to work through problems.”²⁴ Shawn Reese, who is also critical of the vagueness of threat information, stresses the impact of exercise-related costs on

²⁰ Yim, *Homeland security: Risk communication principles*, 18.

²¹ Wray, *Theoretical perspectives on public communication preparedness for terrorist attacks*, 238.

²² *Quadrennial homeland security review report*, 70.

²³ Hsu, “Disaster drills' future may be put to the test,” A1.

²⁴ *Ibid.*, A1.

both the government and private sector. Reese observes: “These costs include the increased security measures undertaken by state and localities, loss to tourism, and the indirect cost on the economy during periods of heightened threat level.”²⁵

In efforts to determine the value and applicability of the National Exercise Program, it is important to consider to what extent the exercises are manipulated by regulators and for what reasons. Hsu writes that the predominant fear among emergency planners and state officials is that the federal government will cut costs and simplify complicated exercise scenarios in order to promote success among participants.²⁶ Cutting costs is a means to minimize exercise complexity and participation while still achieving the mandated objectives, yet many exercise planners translate cost cutting to an inability to determine whether the nation is prepared for a disaster or catastrophic attack. The goal is to fully exercise the nation’s capabilities and reduce the risk of repeating mistakes made after Hurricane Katrina and 9/11. In 2005, State and Local Government Coordination and Preparedness (SLGCP), a DHS entity within the Office for Domestic Preparedness (ODP), spent approximately \$21 million to develop, plan, coordinate, conduct and evaluate TOPOFF-3.²⁷ The actual total cost of TOPOFF-3 has yet to be determined, as SLGCP does not collect funding information from participating federal departments and agencies to determine the total national funding and resources involved.²⁸

On the other hand, significant literature exists to qualify government exercise efforts as beneficial to homeland security and as an effective means of communicating with the American public. Michael Perini defends the seemingly expensive and massive TOPOFF program as relevant on the national level because it challenges responders to work together through limited-notice, real-time, and multi-jurisdictional exercises for

²⁵ Reese, “Homeland Security Advisory System Possible Issues for Congressional Oversight,” 13.

²⁶ Hsu, “Disaster drills' future may be put to the test,” A1.

²⁷ Department of Homeland Security, Office of Inspector General, Office of Inspections and Special Reviews, *A review of the Top Officials 3 exercise* (Washington, D.C.: 2005), 28.

²⁸ *Ibid.*, 28.

state and federal agencies.²⁹ Perini also concludes that balancing the public's right to know with security, safety and privacy issues should be sorted out during exercises and not during an actual crisis.

E. METHODS AND SOURCES

This thesis will analyze the efforts of the Department of Homeland Security to communicate security threats to the American public through a case study examination of both the Homeland Security Advisory System and the National Exercise Program. I will use a combination of reports and assessments from Congressional hearings, the Homeland Security Digital Library (HDSL) and the Federal Lessons Learned Information Sharing (LLIS) network to effectively frame present-day communication efforts. I will draw upon various scholarly articles and publications to identify the most significant issues and related arguments.

A historical review of the Homeland Security Advisory System will highlight the strengths and weaknesses both in its design and implementation as the premier national counterterrorism tool. I will provide evidence that demonstrates the drawbacks to the HSAS and reinforces the American public's desire for increased information, honest and clarity.

A critical review of the National Exercise Program will determine how present-day government efforts and selective exercise scenarios are or are not effectively communicating the most significant threats to the public. Statistical data obtained from the DHS Lessons Learned Information Sharing (LLIS.gov) network will focus on public perception, preparedness, and exercise concerns within various levels of government. Through an analysis of costs and social impact, this study will also assess how national efforts to ensure adequate response capabilities and the protection of citizens have direct and indirect effects throughout the country within both communities and industries and determine whether the costs of national level exercises outweigh the benefits.

Both the Homeland Security Advisory System and the National Exercise Program reviews will offer important insight into the historical and current abilities of the

²⁹ Michael B. Perini, *Public Communications: Vital Link to Maintaining the Public's Trust During Crisis* (Ph.D Dissertation, U.S. Army War College, 2006), 209.

Department of Homeland Security to communicate threats to the American public. From these assessments, I will conclude this project with an examination of future threat communication efforts based largely on the strategic direction available within numerous DHS publications and government documents. Under the widely accepted assumption that terrorism will remain the most significant threat to national security, I will also gauge the future significance of terrorism and its continual evolution as a government responsibility or an inflated public concern.

F. THESIS OVERVIEW

This thesis will address the abilities of the Department of Homeland Security to effectively communicate security threats to the American public. After this introductory chapter, Chapter II will examine the Homeland Security Advisory System (HSAS) in terms of verbal communication. The HSAS analysis will focus on national and regional communication efforts coupled with credibility concerns and public perception of government efforts. An analysis of the historical development of the Homeland Security Advisory System will identify the most significant drawbacks and propose policy adjustments that may clarify communication efforts.

The next chapter will analyze the National Exercise Program in terms of physical activity communication and will concentrate on understanding how social, economic and perhaps even political concerns often compromise readiness by altering or interfering with established exercise plans. It remains essential for exercises to inspire public confidence and demonstrate appropriate national response capabilities, however, costs and applicability must also be considered.

In Chapter IV I conclude by arguing that public relations will remain central to successful crisis management within DHS. I will analyze how both public communication efforts and the decentralization of federal security exercises will contribute to DHS' implementation of what it calls the Homeland Security Enterprise, which is the aggregation of federal, state, local, tribal, territorial, nongovernmental, and private-sector entities, as well as individuals, families, and communities who share a common national interest in the safety and security of America and the American population. The implementation of the Homeland Security Enterprise will be the initial

step towards an increasingly decentralized information-sharing network in which the contributions of local officials become more relevant and private citizens seize the opportunity to prepare, respond and assist in securing the U.S. homeland.

THIS PAGE INTENTIONALLY LEFT BLANK

II. HOMELAND SECURITY ADVISORY SYSTEM

In March of 2002, when the Homeland Security Advisory System (HSAS) was created and initially implemented, the concerns were clear: communicate homeland threats to the public and government agencies in a manner that best prevents, mitigates, and prepares essential services to respond to terrorist attacks. Throughout its eight-year history, the HSAS has come under fire for its applicability, credibility with the public, and ultimately its relevance in the grand strategy of American survival in an age of terrorism. The original goal of the HSAS was to make the American public aware of potential threats to the homeland. Present day security environments demand regional communication of relevant information to empower local governments and American citizens to implement threat solutions pertinent to their perceived level of risk. This chapter contends that despite the simplicity of the current tiered threat level approach, appropriately utilized and regionally communicated threat information would benefit society far beyond today's generalized national color-coded threat assessment.

This chapter will review the creation and national implementation of the Homeland Security Advisory System and analyze the growing debate among elected officials, scholars and citizens regarding its usefulness and validity in an age of constant terror threats and population vulnerability. An operational overview of the HSAS will highlight its historical significance during threat periods and critique its ability to communicate meaningful threat information to the American public. Lastly, this chapter will analyze the drawbacks and weaknesses of the HSAS in efforts to identify useful recommendations to improve public communication and public interest in Homeland Security threats.

A. BACKGROUND AND HISTORY OF HSAS

Homeland Security Presidential Directive 3 (HSPD-3) created the Homeland Security Advisory System (HSAS) in the aftermath of 9/11 to consolidate broad public terror alerts in accordance with recommendations from Tom Ridge, the first Department of Homeland Security Secretary. The Department of Homeland Security sought to

“reduce vulnerability or increase response capability during a period of heightened alert.”³⁰ The HSAS was initially proposed by the President’s Office of Homeland Security (OHS), the predecessor to the Department of Homeland Security (DHS), yet the early responsibility for implementing and managing the advisory system fell within the jurisdiction of the U.S. Attorney General. The HSAS was eventually realigned within the administrative control of DHS and quickly developed into the most visibly recognizable domestic counterterrorism tool, becoming the main communication link with the American public for warnings and security threats.³¹

The HSAS was designed as an all-encompassing security communication tool dependent on information collected from state and local first responders, business leaders, and the public at large. Within a year of establishment, Secretary Tom Ridge told reporters that he believed the system needed to be further refined and that he was worried about the credibility of the system since the public had started questioning the authenticity of HSAS threat levels.³² The HSAS continues to receive significant criticism from local officials for administering broad national threat warnings and failing to directly engage the most at risk American citizens with threat specific information. The original intentions of the HSAS were to create a common operational vocabulary, context, and communication structure to better understand national threats and the appropriate responses to those threats. As a result of poor national risk communication, the complacency and uncoordinated responses of first responders at the state and local levels has perpetuated the transformation of the HSAS into a risk management system intent on determining the probability of an attack and its potential significance.

The Homeland Security Advisory System includes a five color-coded threat level system (see Figure 1) that combines threat information with vulnerability assessments in efforts to communicate with the American public and safety officials. The HSAS serves to aid in the implementation of scaled protective measures and reduce the overall

³⁰ “Homeland Security Advisory System,” Homeland Security Presidential Directive 3, March 11, 2002.

³¹ Jacob N. Shapiro and Dara K. Cohen, “Color Bind: Lessons from the Failed Homeland Security Advisory System,” *International Security*, 32 (2007): 121.

³² Shawn Reese, “Homeland Security Advisory System Possible Issues for Congressional Oversight,” *Congressional Research Service*, RL32023, (2005), 5.

likelihood of a terrorist attack. “The advisory system characterizes appropriate levels of vigilance, preparedness, and readiness in a series of graduated threat conditions.”³³

A majority of Americans remain unaware that the HSAS is actually comprised of additional components beyond the highly visible color scheme that DHS relies on to communicate with citizens and public safety officials. In addition to the color-coded threat level system, the HSAS also contains homeland security threat advisories and homeland security information bulletins. Threat advisories claim to contain actionable information about an incident and the potential targeting of critical infrastructure or other national networks. Information bulletins differ from threat advisories because they focus on communicating information unrestricted by timeliness or specificity found in threat messages to components of national infrastructure. Despite their designed intentions of reaching out to state and local level officials with specific threat information and protecting critical infrastructure, both bulletins and advisories have been criticized for failing to provide truly actionable information. For example, the most specific advisory that has ever been made public was released on August 1, 2004 during a threat level change from yellow-to-orange, simply stating that financial sectors in New York, New Jersey, and Washington D.C., were potential targets of terror attacks.

This afternoon, we do have new and unusually specific information about where al-Qaeda would like to attack. As a result, today, the United States government is raising the threat level to Code Orange for the financial services sector in New York City, Northern New Jersey and Washington, D.C.³⁴

Another aspect of the HSAS is the Homeland Security Advisory Council (HSAC), which provides advice and recommendations to the Secretary during threat periods on matters related to Homeland Security. The HSAC is comprised of state and local government leaders, first responder communities, the private sector, and academia. Per its official charter, the HSAC shall be composed of not more than 26 members and a number of voting *ex officio* members who are appointed by, and serve at the pleasure of,

³³ Roger L. Kemp, "Homeland security: common sense measures to safeguard your community". Fire and Arson Investigator, 2009, 34.

³⁴ Tom Ridge, “Remarks by Secretary of Homeland Security Tom Ridge Regarding Recent Threat Reports,” August 1, 2004.

the Secretary for specified terms as defined by the Secretary.³⁵ Individuals appointed to the HSAC are responsible for recommendations and advice pertaining to Homeland strategy, policy, leadership, coordination, management, implementation, evaluation and feedback.

After consulting with the HSAC, the Secretary of Homeland Security determines whether to raise or lower the HSAS threat level. DHS officials then proceeds to notify all governors, state homeland security advisors and mayors of selected cities via conference calls to inform them that the threat level has been changed. “Following the first conference call and electronic notification via the National Law Enforcement Telecommunications System (NLETS), DHS makes a second conference call to as many state and local law enforcement associations as can be reached.”³⁶ Under the current communication architecture, the HSAS positions the local level responders, who typically play the most significant role in a crisis, at the end of all communication efforts. Evidently it is not protocol for DHS to communicate threat level adjustments to all state and local officials as some claim and have testified that they have never been officially notified. For example, “On April 30, 2003, Jeffery Horvath, chief of the Dover Delaware police department told the Senate Governmental Affairs Committee that his department has never received any official notification of a change of HSAS threat condition and has relied on the news media for this information.”³⁷ Also, Michael J Chitwood, Chief of the Portland Maine Police Department testified that he once received official notification of a threat level change from state authorities eight hours after implementation.

In response to increasing criticism, DHS Secretary Janet Napolitano established the Homeland Security Advisory Task Force in July 2009 in an effort to assess the effectiveness of the color-coded Homeland Security Advisory System. In addition to assessing HSAS, other objectives of the task force were to gauge DHS ability to inform the public about terrorist threats and communicate protective measures within the private

³⁵ “Homeland Security Advisory Council Charter,” February 2009, http://www.dhs.gov/xlibrary/assets/HSAC_Charter.

³⁶ Reese, “Homeland Security Advisory System Possible Issues For Congressional Oversight,” 3.

³⁷ *Ibid.*, 8.

sector and government agencies.³⁸ As of January 2010, the national level commission on the prevention of WMD proliferation and terrorism reported that the recommendations of the task force, appointed by the DHS Secretary, largely remained unimplemented and that critical opportunities to reengage the American public and further develop an informed citizenry have been missed.³⁹

Arguably, the HSAS has succeeded at informing government agencies and federal responders, which bureaucratically operate along predetermined courses of action, yet has increasingly failed to attract public interest and communicate relevant information to the local levels. In contrast to national level administrators, local level responders are concerned with efficiently applying limited resources to threats in a particular area vice addressing an entire region or state without prioritized concerns or pertinent threat information. A survey for the Gilmore Commission Report, a product of the RAND National Defense Research Institute (NDRI) found that 60 to 80 percent of local and state organizations wanted more specific information on the type of incident, location, and time period of the threat.⁴⁰






By examining Reese's Table 2 – Homeland Security Advisory Threat Level Changes (see Figure 2), it is significant to understand that since inception, the HSAS has never operated at the green threat level and only elevated to orange eight times. Anticipated flight bombings originating in the United Kingdom in August of 2006, marked the only instance in which the threat level has been raised to red (severe risk). The security measures and protective action associated with the red threat level were strictly limited to airline operations. Three days later the HSAS lowered the threat level to orange and has since maintained the high threat for all international flights.

³⁸ B. Graham and J. M. Talent, "Prevention of WMD proliferation and terrorism report card An assessment of the U.S. government's progress in protecting the United States from weapons of mass destruction proliferation and terrorism," *Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism (U.S.)* 2010, 14.

³⁹ *Ibid.*, 14.

⁴⁰ "Forging America's New Normalcy: Securing Our Homeland, Protecting Our Liberty," *Gilmore Commission: Fifth Annual Report to Congress*, RAND Corporation (2003), D-7.2.

Citizen Guidance on the Homeland Security Advisory System

Risk of Attack	Recommended Actions for Citizens
 <p>GREEN Low Risk</p>	<ul style="list-style-type: none"> ➔ Develop a family emergency plan. Share it with family and friends, and practice the plan. Visit www.Ready.gov for help creating a plan. ➔ Create an "Emergency Supply Kit" for your household. ➔ Be informed. Visit www.Ready.gov or obtain a copy of "Preparing Makes Sense, Get Ready Now" by calling 1-800-BE-READY. ➔ Know how to shelter-in-place and how to turn off utilities (power, gas, and water) to your home. ➔ Examine volunteer opportunities in your community, such as Citizen Corps, Volunteers in Police Service, Neighborhood Watch or others, and donate your time. ➔ Consider completing an American Red Cross first aid or CPR course, or Community Emergency Response Team (CERT) course.
 <p>BLUE Guarded Risk</p>	<ul style="list-style-type: none"> ➔ Complete recommended steps at level green. ➔ Review stored disaster supplies and replace items that are outdated. ➔ Be alert to suspicious activity and report it to proper authorities.
 <p>YELLOW Elevated Risk</p>	<ul style="list-style-type: none"> ➔ Complete recommended steps at levels green and blue. ➔ Ensure disaster supply kit is stocked and ready. ➔ Check telephone numbers in family emergency plan and update as necessary. ➔ Develop alternate routes to/from work or school and practice them. ➔ Continue to be alert for suspicious activity and report it to authorities.
 <p>ORANGE High Risk</p>	<ul style="list-style-type: none"> ➔ Complete recommended steps at lower levels. ➔ Exercise caution when traveling, pay attention to travel advisories. ➔ Review your family emergency plan and make sure all family members know what to do. ➔ Be Patient. Expect some delays, baggage searches and restrictions at public buildings. ➔ Check on neighbors or others that might need assistance in an emergency.
 <p>RED Severe Risk</p>	<ul style="list-style-type: none"> ➔ Complete all recommended actions at lower levels. ➔ Listen to local emergency management officials. ➔ Stay tuned to TV or radio for current information/instructions. ➔ Be prepared to shelter-in-place or evacuate, as instructed. ➔ Expect traffic delays and restrictions. ➔ Provide volunteer services only as requested. ➔ Contact your school/business to determine status of work day.

**Developed with input from the American Red Cross.*

Figure 1. Homeland Security Advisory System

Table 2. Homeland Security Advisory Threat Level Changes
(March 12, 2002 to Present)

Threat Level	Dates	Number of Days	Reason for Threat Level Change to "Orange"
Elevated (Yellow)	Mar. 12, 2002 - Sep. 10, 2002	—	—
High (Orange)	Sep. 11, 2002 - Sep. 24, 2002	13	Terrorist threat information based on detainings of a senior Al Qaeda operative. ¹
Elevated (Yellow)	Sep. 25, 2002 - Feb. 6, 2003	—	—
High (Orange)	Feb. 7, 2003 - Feb. 27, 2003	20	Intelligence reports suggesting Al Qaeda attacks on apartment buildings, hotels, and other soft skin targets. ²
Elevated (Yellow)	Feb. 28, 2003 - Mar. 16, 2003	—	—
High (Orange)	Mar. 17, 2003 - Apr. 11, 2003	25	Intelligence reports indicated Al Qaeda would probably attempt to launch terrorist attacks against U.S. interests to defend Muslims and the "Iraqi people." ³
Elevated (Yellow)	Apr. 12, 2003 - May 19, 2003	—	—
High (Orange)	May 20, 2003 - May 30, 2003	10	In the wake of terrorist bombings in Saudi Arabia and Morocco, the U.S. intelligence community believed Al Qaeda had entered an operational period worldwide, including attacks in the United States. ⁴
Elevated (Yellow)	May 31, 2003 - Dec. 20, 2003	—	—
High (Orange)	Dec. 21, 2003 - Jan. 9, 2004	19	Increased terrorist communications indicating attacks. ⁵
Elevated (Yellow)	Jan. 10, 2004 - Jul. 31, 2004	—	—
High (Orange)	Aug. 1, 2004 - Nov. 10, 2004	98	Terrorist threat intelligence indicates that Al Qaeda has been planning attacks against financial institutions in New York, Washington, DC, and New Jersey since pre-9/11. ⁶
Elevated (Yellow)	Nov. 11, 2004 - Jul. 6, 2005	—	—
High (Orange)	Jul. 7, 2005 - Aug. 12, 2005	36	Due to terrorist bombings of London mass transit systems, DHS raised threat level for mass transit systems only. ⁷
Elevated (Yellow)	Aug. 13, 2005 - Aug. 9, 2006	—	—

Figure 2. Homeland Security Threat Advisory Threat Level Changes

B. WEAKNESSES AND DRAWBACKS

Each threat level corresponds to specific protective measures that are mandatory for federal agencies, yet provides only recommended actions for the American public.⁴¹ In *Color Bind; Lessons from the Failed Homeland Security Advisory System*, Jacob N. Shapiro and Dara K. Cohen contend that the HSAS can only provide recommended actions because it was not designed to generate confidence; rather DHS assumed that the public would trust the national leadership and believe in the utility of the system's information. The existing recommended actions lack any authoritative enforcement capability and mostly resemble warnings and guidance. Public opinion polling in 2003 found that only 57 percent felt that the HSAS provided useful information and only nine percent reported making any changes to their daily routines in response to the alerts.⁴² According to the Council for Excellence in Government, an independent non-profit organization, the Public Readiness Index is a survey-based tool used to measure the preparedness of individuals, families, and communities. Of those surveyed, almost half have not thought about preparing for an emergency, 34 percent do not think an emergency will happen to them or their family and 25 percent think that nothing they can do would be effective. Twenty-one percent say that not knowing what to do is a major reason for their lack of preparedness, 18 percent say it takes too much time, and 16 percent say it costs too much money.⁴³ The absence of specific threat information has perpetually eroded the trust required to motivate and engage American citizens. "Two out of five Americans are not sure whether or not their local government has an emergency or disaster plan for their community."⁴⁴ In communicating threat information, the federal government must convince the population that the desired

⁴¹ Reese, "Homeland Security Advisory System Possible Issues For Congressional Oversight," 1.

⁴² Jacob N. Shapiro and Dara K. Cohen, "Color Bind: Lessons from the Failed Homeland Security Advisory System," *International Security*, 32 (2007): 129.

⁴³ "Are we ready? Introducing the public readiness index: a survey-based tool to measure the preparedness of individuals, families and communities," *Council for Excellence in Government*. Washington, D.C. 2006, 18.

⁴⁴ *Ibid.*, 7.

protective and responsive actions are worthwhile.⁴⁵ In order for the HSAS to effectively inform the public of homeland threats, citizens must maintain trust in DHS officials and uphold the credibility of the threats produced by the system.

“Since its inception, critics inside government and out have ridiculed the Homeland Security Advisory System for being vague and unhelpful.”⁴⁶ The credibility of the HSAS has been continually undermined as a result of multiple unsuccessful Congressional efforts to improve the risk communication capabilities of the system. “A failed fiscal year 2007 DHS authorization bill proposed a color-free alert system that would allow for regional and sector specific targets.”⁴⁷ In addition, repetitive DHS authorization bills have further scrutinized operational language and responsibilities of DHS officials. Ironically, American citizens are expected to abide by a terror alert warning system that elected officials have repeatedly attempted to dissolve. The following sections highlight various weaknesses and drawbacks associated with the HSAS. Weaknesses are associated with design flaws most notably the all-encompassing color schemes that generalize actual threat conditions into broad threat postures. The drawbacks of the HSAS focus more on the disadvantages of actually implementing the system as designed. Numerous bureaucratic challenges surface as officials attempt to raise and lower threat color levels and also implement protective measures at the local levels that were originally designed for federal agencies.

1. System Weaknesses

The reluctance of the federal government to lower the color alert status after threats have subsided leads to public cynicism about the color status and contributes to the increasingly disconnected relationship between threat warnings and colors.⁴⁸ Citizens are continually unable to associate and interpret the severity of risk with particular colors.

⁴⁵ Jacob N. Shapiro and Dara K. Cohen, “Color Bind: Lessons from the Failed Homeland Security Advisory System,” *International Security*, 32 (2007): 121.

⁴⁶ Spencer S. Hsu, “US Should Simplify Terror Warning Systems,” *The Washington Post*, September 16, 2009, A3.

⁴⁷ Tim Starks, “House Panel Considers Security Improvements, Including New Warning System,” *Congressional Quarterly Today*, March 28, 2006.

⁴⁸ Homeland Security Council (U.S.). 2009. *Homeland Security Advisory System Task Force Report and Recommendations*. Washington, D.C. 2009, 5.

“Homeland Security officials privately acknowledge the many flaws of the system under which the threat level was raised from yellow to orange between September 2002 and August 2004.”⁴⁹ Due to the broad-base approach and general recommended actions, the HSAS has failed to convey the importance of elevated threat levels across various landscapes and population centers.

The DHS has published recommended actions for U.S. citizens that are general in nature and based solely on preparatory actions that amounts to little more than public suggestions. Arguably, most citizens have never seen or read the recommended actions that correspond to particular threat level colors. This lack of public interest in individual protective and preparatory measures can neither be blamed on citizens nor the government; however, the typically generalized HSAS threat messages have reduced government credibility and continually fail to promote public interest in homeland security affairs.

The lack of clarity as to what the color levels require is one of the major weaknesses in the HSAS.⁵⁰ Without any specific actionable steps, the color-coded threat level system serves only to inform the American public that an incident has occurred or is expected to occur which puts the public at risk. Aside from the visual awareness achieved by the HSAS, no other actionable information is provided by the government nor are any mandated actions required of the public.

The federal government is bureaucratically driven to respond proportionately to changes in the national threat level and must implement costly security and preparatory measures. State and local level budgets also incur sizeable costs when threat levels are elevated. “An example of this is the cost of random car searches at Atlanta’s Hartsfield airport, which reportedly requires \$180,000 a month for labor and signage. This cost is borne by Atlanta’s police department and airport administration without appropriate federal reimbursement.”⁵¹ Additionally, “a lack of funding, combined with decreasing

⁴⁹ John Mintz. “DHS Considers Alternatives To Color-Coded Warnings.” *The Washington Post*, May 10, 2005, A6.

⁵⁰ Jacob N. Shapiro and Dara K. Cohen, “Color Bind: Lessons from the Failed Homeland Security Advisory System,” *International Security*, 32 (2007): 124.

⁵¹ Reese, “Homeland Security Advisory System Possible Issues For Congressional Oversight,” 13.

trust in the system and declining confidence in the information it provided has led to a steady decline in the responsiveness of local officials to national alerts.”⁵² As members of large bureaucracies, public officials are constrained to operating along rigid and costly federally developed standard operating procedures that involve increased security, economic losses to tourism and indirect costs on the economy during periods of heightened threat levels.⁵³ The costs associated with HSAS threat level changes prompted the United States Conference of Mayors to release a 145-city survey that reported that during periods of heightened alert homeland security costs increased to an additional \$70 million a week.⁵⁴

It is unreasonable to impose the costs of the upgraded security precautions associated with these alerts on governments and business across the country when terrorists cannot strike everywhere at once. The combined total of eleven weeks spent at orange alert since 9/11 has cost cities an estimated \$750 million in stepped up security measures. The truth is that some targets are much more attractive than others. A nationwide threat alert system makes no sense in a huge country where the level of risk varies wildly from place to place.⁵⁵

Failure to consistently reevaluate and ultimately reset threat levels according to security circumstances can prolong prospective security related costs and perpetually damage already strained budgets.

2. System Drawbacks

The most common perceived drawback of the HSAS is the overall vagueness of warnings. Raising and lowering of the terror threat level is a bureaucratic challenge and subsequently disseminating the available information as a unified message is also difficult as various groups will interpret information in different ways. Under any given scenario or circumstance, DHS is charged with communicating relevant information to federal, state, local, and tribal officials while also providing relevant information to

⁵² Jacob N. Shapiro and Dara K. Cohen, “Color Bind: Lessons from the Failed Homeland Security Advisory System,” *International Security*, 32 (2007): 129.

⁵³ Reese, “Homeland Security Advisory System Possible Issues For Congressional Oversight,” 12.

⁵⁴ *Ibid.*, 13.

⁵⁵ Stephen E. Flynn, “Color Me Scared,” *New York Times*, May 25, 2005, A25.

businesses, families, individuals, and the American public-at-large. Given this momentous challenge each time the threat level must be adjusted, it becomes almost impossible to specify messages according to national concerns. This predictable situation reinforces the need to establish and rely on a regional approach to threat communication. Yim argues that poor communications derived from broad national level warnings and advisories create complacency among lower level responders and also contributes to poor misallocation of limited and valuable response resources.⁵⁶

An operational drawback to the implementation of the HSAS is that “protective measures are provided for each threat condition, but these protective measures are identified only for federal agencies.”⁵⁷ The failure of the HSAS to obligate and only recommend protective measures for states and regions, including the public and private sectors, has led to the independent development of protective measures unique to particular regions and localities. The flexibility of protective measures within different levels of government has caused the Department of Homeland Security to neglect an opportunity to enforce a standardized approach to response activities and capabilities. Furthermore, the apparent lack of standardization may hinder future joint operations in the event of terror attacks that require response participation across multiple jurisdictions and levels of government.

In terms of terms of collaboration, the most common governments that cities work with in order of frequency are their state governments, other local governments, and regional planning authorities. What is interesting is that the federal government is not near the top of this list. This is echoed in the views of city managers on the information that they receive from the federal government; with 32 percent of respondents believing that the color-coded homeland security advisory system was ineffective.⁵⁸

The president of the International Association of Chiefs of Police, William B. Berger, once testified before the Governmental Affairs Committee that the lack of

⁵⁶ R. A. Yim “Homeland Security Risk Communication Principles May Assist in Refinement of the Homeland Security Advisory System,” Testimony, GAO-04-538 T. (Washington, D.C: U.S. General Accounting Office, 2004), 2.

⁵⁷ Reese, “Homeland Security Advisory System Possible Issues For Congressional Oversight,” 1.

⁵⁸ Christopher G. Reddick, "Homeland Security Preparedness and Planning in US City Governments: A Survey of City Managers," *Journal of Contingencies & Crisis Management* 15, no. 3 (September 2007): 166.

defined response protocols for state and local governments was an area of concern among local law enforcement agencies.⁵⁹ The lack of federal mandates and guidance in establishing standardized response capabilities provides individual localities the freedom to assess and create unique capabilities applicable to individual areas however this may reveal regional vulnerabilities during larger joint operations. Despite the disjointed response environment at the state and local level, DHS claims “Ultimately, homeland security is about synchronization efforts with multiple partners across the landscape of America.”⁶⁰

Minimal attention is given to colors and threat levels because there are no required corresponding activities for the public to participate in. Local level officials, if notified by federal officials, are responsible for translating threats and enforcing locally driven response efforts. Even at the local level, officials can implement response capabilities within given jurisdictions, but only suggest and recommend that citizens take appropriate actions.

A major concern in the use of a color coded threat level system void of any true responsibility is that despite DHS genuine efforts to communicate a broad national message, both press and citizens bypass the color threat level and choose to focus on the story behind the threat level change. Citizens are more concerned with the nature of the threat and whether or not it is credible. In particular, citizens desire relevant information pertinent to their personal safety, daily routines, and the continuation of government services. Conversely, the press seeks to exploit the more sensational aspects of security threats to attract viewers and critically debate actions taken by responsible government officials. The press also focuses on investigation efforts and the verification of facts and figures in efforts to uncover the chain of events as opposed to providing useful information that could assist citizens in preparatory or response activities. For example, the disruption of the London terrorist cell on August 10, 2006 caused the terror threat

⁵⁹ Reese, “Homeland Security Advisory System Possible Issues For Congressional Oversight,” 7.

⁶⁰ President's Homeland Security Advisory Council (U.S.). *Top Ten Challenges Facing The Next Secretary of Homeland Security*. (Washington, DC: U.S. Dept. of Homeland Security, 2008), 5.

level to rise to red for commercial flights inbound to the United States from the United Kingdom.⁶¹ “The press paid scant attention to the color change, focusing instead on the plot itself and on the new rules implemented for carry-on baggage.”⁶²

Public communications are further restricted as threat information is typically generalized and withheld from the American public for a variety of reasons to include the avoidance of civil unrest and national security implications. The growing skepticism surrounding HSAS threat levels is reinforced by public concerns that DHS has never explained the sources or quality of intelligence upon which threat levels were based.⁶³ The HSAS functions strictly to provoke citizens to take recommended protective actions commensurate with color based threat levels, yet publicly released information relevant to actual threats remains insignificant as more specific information remain restricted to higher level government officials. Improved transparency is necessary for DHS officials to succeed at public communications. The apparent lack of interest and response to the recommended actions provided by the HSAS for the American public indicate that American citizens are not supportive of general threat information nor are they inclined to individually prepare themselves for unknown and unlikely catastrophes. In order to build consensus and response activity, DHS must disclose additional information meaningful to average citizens and local level officials.

On September 11, 2008, the Homeland Security Advisory Council published the *Top Ten Challenges Facing the Next Secretary of Homeland Security* which advised that “As a nation, we cannot protect everything, against all things, at all times, and at all costs. Fortress American thinking is an unattainable goal and the wrong national strategy.”⁶⁴ It remains imperative that the public communication efforts of DHS strive to extend this message to the American public. Failure to do so will only further contribute to the crumbling credibility of government efforts to secure the homeland. DHS must also aim

⁶¹ Jacob N. Shapiro and Dara K. Cohen, “Color Bind: Lessons from the Failed Homeland Security Advisory System,” *International Security*, 32 (2007): 132.

⁶² *Ibid.*, 132.

⁶³ Reese, “Homeland Security Advisory System Possible Issues for Congressional Oversight,” 4.

⁶⁴ President's Homeland Security Advisory Council (U.S.). *Top Ten Challenges Facing The Next Secretary of Homeland Security*, 11.

to communicate that in opposition to a federally dominated top-down strategy, the American public remains the strength behind all security efforts nationwide. DHS relies on a vigilant American public as much, if not greater than the American public relies on DHS capabilities and organization. Fortress America thinking is an acknowledgement on behalf of DHS that the challenges associated with protecting America are to overwhelming without public support. Failing to communicate this security partnership to even the smallest communities will hinder further coordination efforts and emphasize distrust in government. Lack of trust in government will allow each and every minor safety breach or international incident slightly related to homeland security to be interpreted as some form of security failure and further stir public fear and discontent within the United States.

C. SOLUTIONS FOR IMPROVEMENT

The Homeland Security Advisory Council determined that public disinterest is at the heart of DHS public communications concerns. This research information suggests that methods to improve public interest and confidence include accompanying new alerts with actionable steps the public can take, debriefing the nation after threat alerts are issued and a focused approach to raising and lowering the alert status.⁶⁵

Of concern to DHS officials is the historical evidence that the green threat level indicator (lowest threat level) has become irrelevant, as the United States has never operated at a threat level lower than blue - guarded risk. The Homeland Security Advisory Council's primary recommendations included changing the alert level baseline to blue (guarded risk). Their rationale for resetting the threat level baseline includes acknowledging that a post-9/11 world will continuously demand that the United States remains guarded and vigilant against terrorism threats and disasters. In the words of the Task Force, "the escalators need to run both ways as it is institutionally difficult for DHS to lower the threat level, the Secretary should consider some forcing mechanism by which the alert status defaults to "guarded" in the absence of an affirmative override."⁶⁶

⁶⁵ Homeland Security Advisory Council (U.S.), 2009. Homeland Security Advisory System Task Force Report and Recommendations, 5.

⁶⁶ Ibid., 3.

Often the HSAS has operated at yellow – elevated risk level for consecutive years and at orange – high risk level for upwards of 98 days. The tendency for the HSAS to elevate and rarely recede to a lower threat level translates poorly to the American public. Citizens need to see and know that government actions are providing for a safer and more secure country. By maintaining potentially inflated threat levels, risk adverse DHS officials who may or may not be politically motivated, succeed in communicating that Americans must live fearful of the unknown and that a list of general recommended actions is the only information eligible for public distribution.

The American public must be reengaged and more specifically informed concerning the circumstances and response efforts before, during and after terrorist attacks on the homeland. Prescribed recommended actions within the DHS Citizens Guide provide a strong foundation for public readiness and capability, yet the public level of interest coupled with the credibility of the HSAS remain the central issues. “In federal systems, national leaders cannot compel protective actions by setting an alert level; they must convince constituent governments and private parties that the desired actions are worth the costs.”⁶⁷ The Homeland Security Advisory Council has also linked the existence of the HSAS to risk communications concluding, “an effective risk communications system can mitigate the long-term psychological effects of an incident on the American citizen, which will help safeguard our democracy against overreaction to possible future attacks.”⁶⁸

Another and perhaps the most challenging remedy to the apparent disconnect in threat information between the federal government and the American public is to ensure that government officials present a clear and politically unified message in times of crisis. For example, as the anniversary of the Sept. 11 attacks approached and terrorism fears escalated in the summer of 2002, 10 federal agencies disseminated contradictory warnings to different constituencies and the public.⁶⁹ Additionally, on May 26, 2004,

⁶⁷ Jacob N. Shapiro and Dara K. Cohen, “Color Bind: Lessons from the Failed Homeland Security Advisory System,” *International Security*, 32 (2007): 121.

⁶⁸ President's Homeland Security Advisory Council (U.S.). *Top Ten Challenges Facing The Next Secretary of Homeland Security*, 13.

⁶⁹ John Mintz. “DHS Considers Alternatives To Color-Coded Warnings:” *The Washington Post*, May 10, 2005, A6.

Secretary Tom Ridge, who had sole responsibility for addressing the public about terrorism threats, “appeared on several news shows playing down the danger of a terrorist strike while Attorney General John Ashcroft simultaneously announced that Al Qaeda was almost ready to attack.”⁷⁰ Blatant contradictions of threat information stemming from reputable government sources and even cabinet political appointees severely hamper DHS’s ability to communicate with the American public. Under these politically charged and detrimental conditions, the safety of the American public and the DHS secretary’s responsibility to communicate risk information becomes secondary to potential political gain and posturing.

A solution presented by Congress in a 2007 DHS authorization bill argued that the elimination of color from the HSAS would reduce public disinterest in threat warnings and more appropriately resonate with the American public. This effort is an example of an arbitrary and counterproductive modification to the existing system. Regardless of colors, numbers or shapes used, the central issue is and remains translating meaningful and useful information to the American public before and during times of crisis. Applicable threat information allows individuals to better understand the practical effects of threat warnings and the recommended response activities.

The premise of the HSAS promotes the strong connotation that security can easily be emplaced during times of crisis and casually removed as threats fail to materialize. One alternative to this belief is to manage security matters similarly to how we approach safety – as a matter of routine.⁷¹ Safety is a constant endeavor in which businesses, industries, and even families observe under the recognition of its importance and ability to prevent damage and save lives. Stephen Flynn contends that if we approach our national security in the same manner with which we approach safety, then we can succeed in more efficiently preparing our nation to mitigate future terrorist attacks. “Just as we tailor preparedness for hurricanes, tornadoes, and earthquakes to the area that are most susceptible to them, we need to concentrate our security efforts on the places that

⁷⁰ John Mintz. “DHS Considers Alternatives To Color-Coded Warnings:” *The Washington Post*, May 10, 2005, A6.

⁷¹ Stephen E. Flynn, “Color Me Scared,” *New York Times*, May 25, 2005, A25.

are most at risk of a terrorist attack.”⁷² Congruent to these beliefs, Flynn promotes the ability of individual communities to independently determine their levels of risk, readiness and how to bear the costs associated with government distributed threat specific information.

D. CONCLUSION

The February 2010 Quadrennial Homeland Security Review has indicated that building and sustaining capability at the community level is essential to meeting homeland security strategic aims and realizing our vision for a secure homeland.⁷³ I contend that through vague warnings to the American public and local level emergency responders, the Homeland Security Advisory System has hindered public trust and interest during times of crisis and undermined community involvement essential to strong public readiness.

In an attempt to standardize the threat alert landscape, the Department of Homeland security established the HSAS, which has transformed over time into a large national risk management system reliant on the trust of the American public. Scholars and government officials alike have remarked that the HSAS was not designed to inspire confidence in government and due to questionable management during threat periods; the credibility of the HSAS has suffered in the public eye. “Preservation of credibility and public confidence are also important considerations in the refinement of the current terrorist threat advisory system”⁷⁴

The HSAS priority notification structure has also failed to emphasize local level responders who are capable of making the biggest impacts within their communities during times of crisis. Improved threat credibility and transparency are vital for DHS to reengage the American community and restore public readiness. In 2008, the President’s Homeland Security Advisory Council correctly summarized the inherent nature of the

⁷² Ibid., A25.

⁷³ United States. *Quadrennial Homeland Security Review Report: A Strategic Framework for A Secure Homeland*. (Washington, D.C: U.S. Department of Homeland Security, 2010), 69.

⁷⁴ Yim, “Homeland Security Risk Communication Principles May Assist in Refinement of the Homeland Security Advisory System,” 2.

public communication of risk within DHS as: “one of the toughest challenges for the next Secretary will be to keep the American public engaged and focused on efforts to prepare for any potential domestic or international threat. Maintaining the political will and public support to move forward with necessary, long term efforts to protect the Homeland is a challenge for all Americans.”⁷⁵

I concur with many of the recommendations offered by the HSAC. To succeed at public communications and rebuild public trust in government efforts it is equally important to both provide actionable steps the public can take during a crisis and also debrief relevant states, counties and communities after a threat period or incident. I support eliminating the green threat level advisory as Americans have become accustomed to the guarded blue level indicative of a general threat of terrorist attack. To assume that public officials and citizens would ever again be comfortable with the green threat level and a low risk of terrorist attacks is inconceivable. Federal officials must demonstrate confidence in our national security apparatus by demonstrating the ability to raise and subsequently lower threat colors relevant to actual threat conditions. I support reemphasizing and expanding the use of Homeland Security threat advisories and information bulletins to reconnect with state and local level officials who have become familiar with merely color indicators and gathering crisis information from mainstream news media outlets. The HSAS is an essential system needed to communicate threat information to lower levels, yet it must be utilized as designed by incorporating advisories and bulletins to fill the security information gap.

⁷⁵ President's Homeland Security Advisory Council (U.S.). *Top Ten Challenges Facing The Next Secretary of Homeland Security*, 13.

THIS PAGE INTENTIONALLY LEFT BLANK

III. NATIONAL EXERCISE PROGRAM

As a result of Homeland Security Presidential Directive-8 (HSPD-8), the National Exercise Program (NEP) provides a framework for prioritizing and coordinating federal, regional and state exercise activities, without replacing any department or agency exercises. The NEP allows for various government departments and agencies to align their respective exercises under a single comprehensive program. Annually, one is selected from all submitted exercises to become the National Level Exercise (NLE), which requires senior level participation from the interagency community. DHS maintains responsibility for the multi-year exercise planning system, yet mandates that the Federal Emergency Management Administration (FEMA) implements the NEP. FEMA satisfies the legal requirements of the DHS enterprise by conducting relevant exercises that reinforce training standards, evaluate readiness levels, and support national level preparedness.⁷⁶

This chapter will examine the significance of the annual White House directed operations-based NLE within the context of DHS public communications efforts. NLEs are an important part of DHS strategy for communicating with and preparing American citizens to experience and respond to large-scale terror attacks or natural disasters. Persistent drawbacks of the NLE system include a continued focus on scenarios that are unlikely to occur, a growing emphasis on federally directed activity, and an inability to appropriately communicate security information to the public.

Operations-based exercises, which include drills, functional and full-scale exercises, are used to validate the plans, policies, agreements, and procedures solidified in discussion-based exercises (tabletop exercises).⁷⁷ As one of three broad categories of exercises within the NEP, “NLEs examine the preparation of the government and its officers and other officials to prevent, respond to, or recover from threatened or actual terrorist attacks, particularly those involving weapons of mass destruction, major

⁷⁶ Janet Napolitano, “Internal Memorandum by Secretary of Homeland Security Regarding the National Exercise Program,” August 17, 2010.

⁷⁷ Department of Homeland Security, Office for Domestic Preparedness (U.S.). *Homeland Security Exercise and Evaluation Program Volume 1, Overview and Doctrine*. Washington, D.C. 2003, 15.

disasters, and other emergencies.”⁷⁸ By addressing the extensive planning, coordination, and resources required for NLEs, this chapter will specifically focus on the 15 National Planning Scenarios (NPS) and historical NLE exercise operations to include its predecessor, Top Official (TOPOFF) Exercises.

On any level, exercises are helpful in determining the right balance of safety, security and capability; however, this chapter will argue that under the guidance of the NEP, NLEs have become increasingly complicated, costly, and unrealistic. The interagency community continues to focus on a wide range of events and catastrophes that are unlikely to occur. To realize actual gains in safety, security and response abilities, exercise implementation must be further decentralized to the local levels as NLEs fail to encourage the participation of sub-national units of government and is only binding on the federal executive branch.

Since the inception of Top Official 1 (TOPOFF-1) in May of 2000, Congressionally mandated guidance has directed that NLE are conducted every 12 months in efforts to address one or more of the 15 National Planning Scenarios. TOPOFF is a national-level domestic exercise with an international component, designed to strengthen the nation's capacity to prevent, protect against, respond to, and recover from large-scale terrorist attacks involving Weapons of Mass Destruction (WMD).⁷⁹ TOPOFF 1, the initial exercise, was a domestic preparedness exercise focused on consequent management of an actual chemical, biological, or cyber terrorist event. “It was the largest exercise of its kind to date, involving \$3 million in direct costs and much more in indirect costs.”⁸⁰ The following year Dark Winter 2001 was conducted as a tabletop exercise for senior level policy makers that involved the virtual release of smallpox in three malls in the United States. TOPOFF 2 was held in 2003 as a Congressionally mandated full-scale national terrorism exercise. “It was designed to identify vulnerabilities in the nation’s domestic

⁷⁸ R. E. Petersen, et al., *Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress* (Ft. Belvoir: Defense Technical Information Center, 2008), 12.

⁷⁹ Text of Top Officials (TOPOFF) as located on the State Department website at: <http://www.state.gov/s/ct/about/c16661.htm> (accessed October 5, 2010).

⁸⁰ Thomas V. Inglesby, “Observations from the Top Off Exercise,” *Public Health Reports*, 116, Supplement 2 (2001), 1.

incident management capability by exercising the plans, policies, procedures, systems, and facilities of federal, state, and local response organizations against a series of integrated terrorist threats and acts in separate regions of the country.”⁸¹ In contrast to TOPOFF 1, the focus of TOPOFF 2 was the detonation of a dirty bomb, which was conducted as an open exercise in which participants were made aware of exercise conditions prior to the actual exercise and then participated in seminars and roundtable discussions. Also, the associated cost escalated significantly since the original \$3 million dollar exercise to over \$16 million. TOPOFF 3 was conducted in April of 2005 at an even higher cost of \$21 million dollars that again simulated a chemical and biological attack and included related exercises in the United Kingdom and Canada. TOPOFF 4 also focused on a radiological dispersal device attack and was collectively conducted in Portland, OR, Phoenix, AZ, Washington, D.C., and for the first time in the U.S. territory of Guam. TOPOFF 5 was suspended in August 2008 due to allegations of contracting policy improprieties yet national level exercises continued under the new name: Tier 1 National Level Exercises. NLE 2009 developed into a five-day exercise choosing for the first time to focus on terrorism prevention and protection as opposed to response and recovery. The challenge for NLE 2009 was to prevent a terrorist from entering the United States to carry out additional attacks in the aftermath of a terrorist event outside the country. NLE 10 (Eagle Horizon) was conducted in May of 2010 as a drill focusing on continuity of government operations after an improvised nuclear device detonates in a major U.S. city. Likewise, NLE 2011 is planned to involve a terrorist event as is NLE 2012, which will likely focus on cyber terrorism.

A. NATIONAL LEVEL EXERCISE: 15 NATIONAL PLANNING SCENARIOS

The National Planning Scenarios (NPS) are high-consequence threat scenarios modeled after potential worst-case terrorist attacks and natural disasters that are designed to assess emergency response capabilities. According to documents available on the

⁸¹ “FEMA-Suspended TOPOFF Exercise Replaced by National Level Exercise, Tier 1,” Suburban Emergency Management Project (SEMP), BIOT Report # 636, July 20, 2009, http://www.semp.us/publications/biot_reader.php?BiotID=636.

FEMA Lessons Learned Information Sharing website (LLIS.gov), the scenarios were developed by a federal interagency group led by the Homeland Security Council (HSC) to illustrate the potential scope, magnitude, and complexity of major events that we should prepare for as a nation.⁸² However, as of February 2010, the DHS Inspector General's Office concluded that "the department is making progress relative to federal incident management plans associated with the NPS, but a full set of plans has not yet been completed for any scenarios."⁸³ The multi-year delay has been attributed to the time required to implement the Integrated Planning System that guides the federal planning process.

It remains important to remember that the establishment of the NPS was based on an all-hazards approach to safety and national security in an effort to represent a range of potential terrorist attacks and natural disasters. "The objective was to develop a minimum number of credible scenarios in order to establish a range of responsive requirements to facilitate preparedness planning."⁸⁴ Not all potential hazards can be or have been addressed. Scenario planning is constrained only by imagination and reinforced by historical data and intelligence. "The majority of the 15 National Planning Scenarios arguably have a relatively low likelihood of occurring, yet the majority receive more attention than scenarios based on events that occur with greater frequency, but are arguably less sensational."⁸⁵

According to DHS officials, the National Planning Scenarios (NPS) are "designed to focus contingency planning for homeland security preparedness work at all levels of government and the private sector."⁸⁶ As recently as August of 2010, DHS Secretary, Janet Napolitano, released an internal memo to FEMA administrator W. Craig Fugate in which she acknowledged that an exercise policy shift was necessary to ensure our ability

⁸² Department of Homeland Security (U.S.) Office of State and Local Government Coordination Preparedness (SLGCP), *Capabilities Based Planning Overview 12-17*. Washington, D.C. 2004, 1.

⁸³ Department of Homeland Security (U.S.). Office of Inspector General, *DHS' Progress in Federal Incident Management Planning*. Washington, D.C. 2010, 1.

⁸⁴ Homeland Security Council (U.S.). *National Planning Scenarios: Executive Summaries*. Washington, D.C. 2005, ii.

⁸⁵ R. E. Petersen et al., *Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress*, 37.

⁸⁶ *Ibid.*, 12.

to enact plans for preventing, responding, and recovering from disasters and acts of terrorism.⁸⁷ In her memo, Secretary Napolitano communicated that she believes “an effective exercise program is the cornerstone of our nation’s collective preparedness and resilience.”⁸⁸ Subsequently, she directed a NEP revision designed to incorporate a two-year progressive exercise program vice annually mandated exercises. Under her direction, each two-year cycle will culminate with a NLE, yet planning and coordination efforts will be built around a series of more frequent, smaller-scale drills, tabletop and functional exercises designed to meet operational and legal objectives instead of just addressing a single catastrophic scenario. This is a positive change in the federal exercise landscape as these adjustments maintain the potential to address previous shortcoming of the NPS, which are the basis for NLEs under the NEP. The frequency of interaction and exercises will produce more opportunities for smaller state, local and tribal responders to progressively participate with larger more federally bound entities. The willingness of DHS and FEMA to emphasize the smaller proponents of emergency response will support national efforts to capitalize on local knowledge, resources, and expertise.

Since early 2000, NLE have ranged wildly from notice to no-notice, operational to tabletop, domestic to international, and functional to full-scale exercises. “Multi-year planning, stakeholder agreements, and resource management are essential ongoing processes that provide the basis for planning, conduct, and evaluation of individual exercises.”⁸⁹ Additionally, exercises have been chaired by various federal departments and agencies and have also included relevant infrastructure members of the private sector.

A review of historical and near term future exercises highlights the significant influence that terrorism continues to have on American society. Congress originally required TOPOFF exercises to focus on terrorism, yet the historical preference of NLE (second generation TOPOFF) exercises to continue that focus ten years after inception

⁸⁷ Janet Napolitano, “Internal Memorandum by Secretary of Homeland Security Regarding the National Exercise Program,” August 17, 2010.

⁸⁸ Ibid.

⁸⁹ Department of Homeland Security, Office for Domestic Preparedness (U.S.). *Homeland Security Exercise and Evaluation Program Volume 1, Overview and Doctrine*. Washington, D.C. 2003, 13.

may be the result of the fearful effect that these catastrophic scenarios have on the public. However, a simple analysis reveals negligible attention is being paid to natural disasters and other lower level more likely to occur scenarios. Even though three of the fifteen national planning scenarios are natural disaster scenarios, not one has been exercised since the establishment of the National Level Exercise program. Additionally, escalating costs continue to draw criticism to the NLE program. Wermuth of the RAND Corporation commented in 2006 shortly after TOPOFF 3 was conducted for approximately \$21 million dollars, “exercises could be done in 30 cities for the price of a single two-city TOPOFF.”⁹⁰ As an example, the cost of all TOPOFF 3 expenditure line items (in 2005 dollars) is provided below. Consideration for future NLE planning should focus on the high cost of subcontractors and consultant as well as the rapidly escalating costs of the full-scale exercise. Expenditure calculations and information of this detail are not readily available to the public, probably because DHS and other participating agencies would find it difficult to validate the use of taxpayer money on this scale

⁹⁰ Zach Phillips, “Emergency Preparedness Exercises Remain an Imperfect Science,” *GovernmentExecutive.com*, (November 2006).

**Office of State and Local Government Coordination and
Preparedness TOPOFF 3 Expenditures
As of July 11, 2005⁴⁴**

TOPOFF 3 Expenditure Line Items	Totals
LABOR	\$ 7,832,146
TRAVEL	\$ 2,204,439
SUBCONTRACTOR and CONSULTANTS	\$ 8,752,965
OTHER DIRECT EXPENDITURES	\$ 2,698,081
EXERCISE EXPENDITURES by CATEGORY	
Initial Planning Conference	\$ 49,121
Mid-Term Planning Conference	\$ 211,128
Final Planning Conference	\$ 178,400
After Action Conference	\$ 149,909
TOPOFF 3 Full-Scale Exercise	\$ 13,088,416
Cyber Exercise	\$ 727,182
Command Post Exercise	\$ 1,131,067
Large Scale Game	\$ 355,911
Chemical Seminar	\$ 480,942
Biochemical Seminar	\$ 586,430
Public Affairs Seminar	\$ 716,949
Advance Distance Learning Exercise	\$ 293,264
Virtual News Network	\$ 2,494,740
Information Technology Architecture	\$ 1,024,170
TOTAL TOPOFF 3 EXPENDITURES	\$ 21, 487,631

Table 1. TOPOFF 3 Expenditure Line Items

Provided below are overviews of each of the fifteen National Planning Scenarios. The distribution between potential terrorist activities and natural disasters remains highly relevant to our preparedness as a nation. Current policy emphasizes a wide range of terrorists attacks (12 of 15 scenarios) as opposed to only three natural disasters including a category 5 hurricane, a major 7.5 magnitude earthquake and a pandemic influenza outbreak.

Appendix C

Overview of the National Planning Scenarios

Scenario 1: Nuclear Detonation – Improvised Nuclear Device

- Members of a terrorist organization have detonated a 10-kiloton improvised nuclear device in a heavily populated metropolitan area. The initial detonation causes total infrastructure damage in a 3-mile radius and various levels of radiation spanning out 3,000 square miles. As casualties climb in excess of several hundred thousand, hundreds of thousands of survivors either shelter in place or are forced onto the city's transportation system to seek shelter in safe areas or evacuate the city. The city is now facing hundreds of billions of dollars in damage and a recovery effort that will take years.

Scenario 2: Biological Attack – Aerosol Anthrax

- Two individuals release 100 liters of aerosolized anthrax into the air of a major metropolitan city. More than 330,000 people are exposed to the anthrax spores. Casualties and injuries resulting from the inhaled anthrax and subsequent infection reach upwards of 13,000 people. The economic costs associated with the closure and decontamination of affected areas may run in the billions of dollars, and the city will likely face a recovery effort that will take months.

Scenario 3: Biological Disease Outbreak – Pandemic Influenza

- A new strain of avian influenza has spread to the United States. Estimates predict that fatalities could range anywhere between 209,000 and 1.9 million people, with an even greater number requiring hospitalization. Hospital bills alone could reach upwards of \$180 billion.

Scenario 4: Biological Attack – Pneumonic Plague

- Members of a terrorist organization manufacture the causative agent of plague and disseminate it in several metropolitan areas using biological warfare dissemination devices. Approximately 36 hours after release, patients begin showing up at hospitals with rapidly progressing and severe respiratory illnesses. Estimates predict that fatalities could range upwards of 9,500 people with approximately 28,383 people becoming ill. As word gets out that pneumonic plague is spreading, hospitals will see an influx of people crowding into emergency rooms, possibly creating a shortage of available beds.

Scenario 5: Chemical Attack – Blister Agent

- Members of a terrorist organization use a lightweight aircraft to spray Agent Yellow, which is a mixture of two blister agents that can cause permanent damage to the respiratory system if inhaled and severe burns to the eyes or skin, into a crowded college football stadium. Thousands are injured and many are killed as people flee from the contaminated stadium. Additional injuries and fatalities will occur as a result of contact with the blister agent. Tens of thousands of people will need decontamination, as well as both short-term and long-term care.

Appendix C

Overview of the National Planning Scenarios

Scenario 6: Chemical Attack – Toxic Industrial Chemicals

- Sleeper cells of a domestic terrorist organization have launched a multiphase attack at a port and a nearby petroleum refinery. Utilizing vehicle-borne improvised explosive devices, the terrorists target a U.S. Coast Guard facility and two container ships containing hazardous material. The terrorists initiate the second phase of the attack by launching rocket-propelled grenades into the center of the petroleum refinery. Several hundred people are killed, thousands are injured, and thousands more are forced to evacuate or shelter in place as a result of the explosions, fires, and vapor plume. Recovery efforts will likely take months and the economic impact will likely be in the billions.

Scenario 7: Chemical Attack – Nerve Agent

- Members of a terrorist organization have acquired the nerve agent sarin and have released it into the ventilation system of a large office building in a metropolitan area. The agent quickly kills 95% of the building's 6,000 occupants. Even more injuries and deaths occur as first responders arrive on the scene unaware of the current conditions. As the nerve agent escapes the building, almost 50,000 people located in adjacent buildings are forced to shelter in place. Recovery time will likely be 3 to 4 months, with the total economic impact reaching upwards of \$300 million.

Scenario 8: Chemical Attack – Chlorine Tank Explosion

- Members of a terrorist organization have detonated an explosive device on a 60,000-gallon storage tank filled with liquefied chlorine gas. The terrorists have also planted improvised explosive devices, set to detonate at varying intervals, close to the tank in order to harm emergency responders. Within an hour, there are almost 10,000 people crowding into emergency rooms with severe respiratory difficulties. As the gas continues to move downwind, as many as 35,000 people, or 5% of those in the affected area, are exposed to potentially lethal doses of chlorine gas. Recovery will take several weeks and likely cost millions of dollars.

Scenario 9: Natural Disaster – Major Earthquake

- A major metropolitan area, with a population of almost 10 million people, experiences a 7.5 magnitude earthquake followed shortly by an 8.0 magnitude earthquake. In the area within 25 miles of the fault, many homes and buildings are completely destroyed. Approximately 1,400 people are killed, 100,000 more are crowding into hospital emergency rooms, and an intense search and rescue for an estimated 20,000 people has been launched. Recovery efforts are expected to range from several months to several years, and the estimated total economic impact is projected to be in the billions.

Appendix C
Overview of the National Planning Scenarios

Scenario 10: Natural Disaster – Major Hurricane

- A category 5 hurricane, with sustained wind speeds in excess of 160 miles per hour and a storm surge 20 feet higher than normal, makes landfall at a major metropolitan area. The storm surge, heavy winds, and subsequent tornados spawned by the hurricane cause destruction to nearly 200,000 homes and result in nearly 1,000 fatalities. With such a wide path of destruction, recovery from the hurricane will likely take several months to a couple of years with the total economic impact reaching into the billions.

Scenario 11: Radiological Attack – Radiological Dispersal Devices

- Members of a terrorist organization have manufactured and detonated a radiological dispersal device or a “dirty bomb” in three regionally close, moderate to large cities. Each explosion causes significant damage to many of the buildings and structures in the immediate area of the blast. At each site, there are approximately 180 deaths and upwards of 20,000 detectable contaminations. Recovery efforts will likely take several months to a couple of years. Total economic loss will be in the billions of dollars.

Scenario 12: Explosives Attack – Terrorist Use of Explosives

- Members of a terrorist organization have carried out a multipronged attack using improvised explosive devices at a large urban entertainment/sports venue. Three suicide bombers detonated their devices, killing and injuring some people and sending the rest of the large crowd in a frantic rush to the exits, where they are met by the detonation of a large vehicle bomb. Similar detonations also occur near a crowded public transportation concourse, a parking lot, and inside the lobby of the nearest hospital emergency room. The explosions combine to cause millions of dollars in damage and to kill approximately 100 people. Recovery efforts will take weeks.

Scenario 13: Biological Attack – Food Contamination

- A member of a terrorist organization, who works at a meat processing plant on the West Coast, contaminates the meat with anthrax. Two contaminated batches of ground beef were sent to two different states. In a 10-day span, hospitals on the West Coast begin to see a sudden influx of people with gastrointestinal problems. Upwards of 1,800 have become ill and there have been 500 fatalities. Recovery efforts to address contamination sites and provide for those who have become ill will take millions of dollars and likely last for several weeks.

Scenario 14: Biological Attack – Foreign Animal Disease

- Members of a terrorist organization have launched a biological attack on the agricultural industry by infecting livestock at various transportation sites with a foreign animal disease. Farmers in several states quickly realize that many of their animals are ill. As it is realized that a foreign animal disease is spreading, recovery efforts will likely take weeks and require hundreds of millions of dollars to diagnose, quarantine, destroy, and dispose of livestock herds.

Appendix C

Overview of the National Planning Scenarios

Scenario 15: Cyber Attack

- **Members of a terrorist organization launch a cyber attack against critical infrastructures that rely on the Internet. Service disruptions occur across many sectors and there is a general fear that there will be a loss of confidence in the Internet and the services it provides. Recovery efforts will likely take months and cost upwards of several hundred million dollars.**

Figure 3. National Planning Scenarios

B. NATIONAL LEVEL EXERCISE: DIRECTED PARTICIPATION

Since the inception of the National Exercise Program, FEMA has held responsibility for implementing the annual National Level Exercise. As noted above, the new direction of DHS exercise policy involves reaching out to local level officials and responders in hopes of progressively building America's national response capabilities towards a culminating NLE every two years. However, what remains relevant and stagnant is that FEMA still operates according to the all-hazards approach exercised within the federally dominating and terror-centric National Planning Scenarios. In efforts to understand what affect the new exercise vision will have and how it will resonate with the American public it is important to understand the growth and results of past exercises.

The first steps to counterbalance the dependency of national level exercises focusing solely on terrorism situations have been taken by DHS Secretary Janet Napolitano. Her desire to stress more frequent, smaller-scale drills, tabletops, and functional exercises will positively resonate with local level officials and responders. By providing increased opportunities for interaction and collaboration, DHS can effectively spread best practices more often than during an annual overarching federally imposing national exercise oriented around the development of senior federal officials. These objective focused drills may also contribute to breaking down the jurisdictional concerns that have historically plague the NLE system. Despite a promising outlook for interaction with lower levels of government and response, participating elements must also be weary of exercise fatigue while attempting to balance limited time and resources.

“Exercise fatigue is exacerbated when exercise activities do not contribute to appreciable improvements in intergovernmental coordination, exercise policies, plans, or emergency response performance.”⁹¹

Despite FEMA spending \$218 million dollars over the past five years on national level exercises to incorporate all levels of government and the private sector, formidable challenges and impediments still block federal, state, local and even tribal participation efforts. The NEP implementation plan is binding on the federal executive branch but does not mandate exercise participation by sub-national units of government.”⁹² This creates an emergency response community where only selective units or localities that can adapt to federally driven exercise requirements gain an opportunity to meet and interact with federal officials and evaluate their own capabilities under real-time conditions. For example, the Homeland Security Exercise and Evaluation Program (HSEEP), funding, exercise flexibility and lengthy planning schedules all hinder our collective national preparedness.

The HSEEP is a federally driven emergency exercise response framework that developed following domestic terror attacks in 1995 and 2001. The purpose of the HSEEP is to provide common exercise policy and program guidance that constitutes the national standard for homeland security exercises.⁹³ As part of a five volume series produced by DHS to administer and evaluate national exercises, the HSEEP has been criticized for maintaining significant emphasis on federal officials during catastrophic exercises and ignoring the efforts of state and local level responders. The HSEEP can even alienate federal agencies as “no explicit statutory or executive authority that compels federal agencies to use the HSEEP method has ever been identified.”⁹⁴ More importantly the HSEEP further restricts participation across all levels of government as

⁹¹ R. E. Petersen et al., *Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress*, 27.

⁹² *Ibid.*, 29.

⁹³ Department of Homeland Security, Office for Domestic Preparedness (U.S.). *Homeland Security Exercise and Evaluation Program Volume 1, Overview and Doctrine*. Washington, D.C. 2003, 4.

⁹⁴ R. E. Petersen et al., *Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress*, 19.

exercises paid for with funds obtained through the DHS Homeland Security Grant Program (HSGP) must be managed and executed in accordance with HSEEP regulations.

Exercise participants who choose to avoid obligatory federal funding are often faced with respective budget concerns when considering whether to participate in larger, federally dominated exercises.

In the Oregon venue of TOPOFF 4, the City of Portland worked on the exercise for two years prior to the Full-Scale Exercise, and spent more than \$10 million dollars. Of that total, Urban Area Security Initiative grants (a regionally focused component of the Homeland Security Grant Program) covered between \$6 and \$8 million dollars, leaving the city to pay more than \$2.5 million dollars.

Non-federal exercise participants must leverage the cost of exercise participation against the probability that any financial or personnel investments may derail their ongoing area specific emergency preparedness program. As Perrow argues, participation in federally regulated and evaluated exercises may prove valuable, as municipal and local leaders “get a chance to see another’s point of view, establish personal contacts and build trust.”⁹⁵ The downside to collaboration with DHS and federal entities for lower level responders is that opportunities to interact during the exercise and design process may be limited. “One observer described DHS interactions as a directive process, with DHS providing the direction.”⁹⁶

National Level Exercises have also been criticized as evolutions designed to ready top government officials and political appointees for crisis management roles in the event the unthinkable happens during their tenure. Typical political appointments last between 18 months and two years during which an official may be provided a single opportunity to test his or her management capabilities to avoid a political disaster. Contrary to the

⁹⁵ Charles Perrow, “The Disaster after 9/11: The Department of Homeland Security and the Intelligence Reorganization,” *Homeland Security Affairs* II, No. 1 (April 2006).

⁹⁶ R. E. Petersen et al., *Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress*, 30.

belief that exercises are designed for responders, “the general intention of an NLE is to support government officers’ preparations for managing national crisis, and accountability of those who support them.”⁹⁷

The top-down approach to exercises and national preparedness evolutions in which DHS interacts with state and local level responders is also evident when considering exercise flexibility and coordination efforts. “Many hospitals, police and fire departments cannot meet the level of demand a disaster or large-scale emergency places on them.”⁹⁸ Exercises also tend to interrupt day-to-day routines and hinder the availability and maintenance of public services. “In particular, state, territorial, local and tribal entities that wish to participate in an NLE must allocate resources through their respective budget processes well in advance of their participation, or risk disrupting the regular duties of available responders.”⁹⁹ To coincide with budget alterations, larger federal exercises often demand that state and local level responders reconfigure their respective calendars to accommodate federal exercise activity. Even at the federal level, “agencies are expected to shape their participation to fit the themes and schedules of NLE scenarios”¹⁰⁰ “As a common foundation for exercise development, the scenarios reduce the possibility that agencies exercising the same basic type of event will exercise greatly different consequences which may lead to vastly different capability requirements and preparedness expectations.”¹⁰¹ As a result of the burdening requirements for planning, coordination, money, and personnel in the participation of national level exercises, state and local level responders are not precluded, yet encouraged to develop their own scenarios to supplement the National Planning Scenarios.¹⁰²

⁹⁷ Bellavita, April 6, 2010. “Does the Nation Need a National Level Exercise Program?,” on the Homeland Security Watch Blog, <http://www.hlswatch.com/2010/04/06/does-the-nation-need-a-national-level-exercise-program>.

⁹⁸ Ibid., 34.

⁹⁹ Ibid., 36.

¹⁰⁰ R. E. Petersen, et al., *Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress*, 14.

¹⁰¹ Homeland Security Council (U.S.). *National Planning Scenarios: Executive Summaries*. Washington, D.C. 2005, iii.

¹⁰² Ibid., ii.

C. A FAILURE OF COMMUNICATION

According to the Quadrennial Homeland Security Review Report (February 2010), “exercises provide a vital tool for homeland security personnel, from first responders to senior officials, to practice operational activities and decision making processes in a realistic but risk-free environment.”¹⁰³ The high costs of some exercises are capable of communicating the importance of a particular national capability and may even demonstrate how actively funneling resources into an exercise actually improves our preparedness. Yet, in reality, annually conducting national level exercises by drawing on the limited resources of participating entities burdens society with social, economic, and political costs aside from the necessary financial costs. Exercises are necessary to test our capabilities and uncover our vulnerabilities, yet the costly administration and focus of our efforts have been misguided according to perceived risks, undermined by political influence, coerced by exercise manipulation, and infrequently reported in the media.

Failing to plan and administer exercises to maintain our preparedness on all levels is politically unsustainable and even more so unacceptable in an American society still clinging to the hope that an attack comparable to the scope and magnitude of 9/11 is no longer a possibility. Given the potential social disruption and escalating economic costs if an incident were to actually occur, our only reasonable option is to invest in exercise activity to test our response forces. This logic raises the subsequent questions of how much and how often to invest to actually improve security and ensure an adequate response capability. FEMA has historically invested over \$218 million since 2005 in exercises alone, which led DHS Secretary Janet Napolitano to conclude that “drills have grown into unrealistic, costly, and over-scripted productions which have evolved into an elaborate game rather than opportunities for officials to work through problems.”¹⁰⁴

For example, the original NLE 2010 was scheduled to test our nation’s abilities to handle and respond to the detonation of a nuclear device in a major U.S. city. The city

¹⁰³ Department of Homeland Security (U.S.) Quadrennial Homeland Security Review Report: A Strategic Framework for A Secure Homeland. Washington, D.C. 2010, 70.

¹⁰⁴ Spencer S. Hsu, “Disaster Drills' Future May Be Put To The Test; National Exercises Could Be Scaled Back” (Op-Ed), The Washington Post, April 2, 2010, A1.

selected and planned for was Las Vegas, NV, where the epicenter of the blast would have been Las Vegas Boulevard, a social and economic playground for many Americans. Under political pressure from Senate Majority Leader Harry M. Reid (D-Nev.), who was strongly backed by casino and business interests, the Obama Administration cancelled and subsequently relocated the exercise to Indianapolis, Indiana. Senator Reid cited that an exercise of that caliber (a nuclear detonation) would frighten away tourists and “unacceptably harm” the region’s battered economy.¹⁰⁵ The intention of NLE 10 was to simulate a nuclear explosion, involve over 10,000 emergency responders and even incorporate the use of military forces at an estimated cost of \$15 million dollars of taxpayer money. As a result of political and economic sensitivities, “FEMA announced only four months before that it would scale back the exercise to focus on what could be done without state and local participation, settling on a largely Washington-based series of table-top drills and contingency operations.”¹⁰⁶ This example demonstrates the federal bearing and control over exercises and how political and economic pressures are capable of manipulating exercise schedules at the expense of state and local officials and responders. The collective efforts of Nevada officials as well as the financial resources committed were essentially wasted as years of planning and coordination evaporated under a last minute federal directive.

According to the DHS Inspector General April 2009 report, “National Exercise Program (NEP) managers describe securing sufficient federal support for TOPOFF/NLEs as a primary challenge in establishing a national exercise program.”¹⁰⁷ Federal challenges include the assignment of a representative executive to the executive steering committee, projected allocation of resources and the imposing focus on principally DHS objectives. “Additionally, when agency leadership roles are simulated, or played by

¹⁰⁵ Spencer S. Hsu, “Disaster Drills’ Future May Be Put To The Test; National Exercises Could Be Scaled Back” (Op-Ed), *The Washington Post*, April 2, 2010, A1.

¹⁰⁶ *Ibid.*, A1.

¹⁰⁷ Department of Homeland Security (U.S.) Office of Inspector General. *DHS Efforts To Address Lessons Learned in the Aftermath of Top Officials Exercises*. Washington, D.C. 2009, 12.

officials who would not lead response efforts to an actual incident, the effectiveness of exercises as a tool to enhance preparedness among officials with principle response functions may be questioned.”¹⁰⁸

Conversely, state and local entities encounter difficulties with exercise participation due typically to late notifications during the planning process and unclear benchmarks and guidelines for participation. Some state and local level officials also insist that in order to ensure maximum participation value, they need to be considered not only earlier in the planning process, but also earlier in the exercise design stage.

The means by which we evaluate and generate data to improve future preparedness is another important aspect of national exercises in determining whether Americans realize any security value from the significant financial investments required. The focus of these concerns remains our ability to stress, test, and operate our collective response capabilities to their maximum potential. However, “some emergency planners and state officials say they fear that as the government cuts cost, it may dumb down the test so that participants will pass them more easily.”¹⁰⁹ The scope, costs, and actual probability of attack given certain parts of the country are all contributing factors that may inadvertently expand or contract the purpose and reality of an exercise. Likewise, an ability to evaluate exercise participants is necessary to gauge success and effectively contribute to post-exercise analysis, observations, and recommendations. For example, more than 650 evaluators participated in TOPOFF 4, yet the majority of evaluators “did not complete the National Exercise Division (NED) evaluator training, or familiarize themselves with the exercise plan, scenario, missions, policies, and procedures specific to their assigned location.”¹¹⁰ In fact, “some of the evaluators said that they were selected by their departments and agencies to serve as evaluators shortly before the start of TOPOFF 4 exercise.”¹¹¹ Without sufficient knowledge and a relevant understanding of

¹⁰⁸ R. E. Petersen et al., *Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress*, 36.

¹⁰⁹ Spencer S. Hsu, “Disaster Drills' Future May Be Put To The Test; National Exercises Could Be Scaled Back” (Op-Ed), *The Washington Post*, April 2, 2010, A1.

¹¹⁰ Department of Homeland Security (U.S.) Office of Inspector General. *DHS Efforts To Address Lessons Learned in the Aftermath of Top Officials Exercises*. Washington, D.C. 2009, 14.

¹¹¹ *Ibid.*, 15.

exercise objectives, poorly trained evaluators detract from the purpose of critically assessing officials and responders and may fail to uncover systemic vulnerabilities.

The amount of data generated from exercises can have a huge impact on a particular unit or group of officials, but only if that data is organized, accurately represented and accessible.

Since the first Top Officials exercise in 2000, neither a process for tracking weaknesses and how those weaknesses were resolved, nor a method for identifying and analyzing trends in corrective actions or significant lessons learned has been established. As a result, federal, state, local, and territorial agencies were unclear regarding the implementation of suggested improvements following preparedness exercises.¹¹²

The current standard for managing DHS exercise after action reports (AARs) is to designate all reports as For Official Use Only (FOUO), because they are considered to contain potentially sensitive information, and to distribute them under loan conditions to a limited number of government departments and agencies. This practice inhibits the ability of DHS to communicate information about these exercises to the American public. As the DHS IG reported, “DHS has not yet developed an effective process to disseminate TOPOFF/NLE AARs, lessons learned, and best practices to a broad national audience.”¹¹³ In attempts to communicate exercise results to a national audience, National Exercise Division personnel conducted a 1-day National After-Action Conference in which only 142 homeland security officials participated in person or via webcast. Aside from national level conferences, the primary way to access TOPOFF lessons learned and best practices is through the Lessons Learned Information Sharing website (LLIS.gov) which requires citizens to endure a screening process focused on validating a applicants eligibility and necessity to access the information.

Some additional concerns about the applicability of the National Planning Scenarios and their use as the framework for culminating National Level Exercises are the failures to generate informative public affairs reporting, an increased focus on developing federal officials vice responders and a lack of exercise reporting transparency.

¹¹² Department of Homeland Security (U.S.) Office of Inspector General. *DHS Efforts To Address Lessons Learned in the Aftermath of Top Officials Exercises*. Washington, D.C. 2009, 1.

¹¹³ Ibid., 16.

This past May, the 2010 National Level Exercise Eagle Horizon took place in Indianapolis, Indiana, Los Angeles, and Washington D.C., yet failed to generate any significant press or reporting available to the public. Typically these worst-case catastrophic attack scenarios fail to generate public interests, as many components of the exercise are often watered-down or reduced to notional tabletop analysis of forces, potential damage incurred, and response capabilities. Eagle Horizon 2010 should have been different. This scenario involved the exercise detonation of a nuclear weapon in the heart of Indianapolis coupled with related terrorist threats to the metropolitan hubs of Los Angeles and Washington D.C. As noted in Homeland Security Watch, “this exercise had been scheduled for over two years, with millions of dollars spent, and thousands of DHS and component members participating.”¹¹⁴ For a domestic terrorism drill designed to test our basic continuity of government abilities, the importance of communicating this results-based knowledge to the American public cannot be understated. The failure to emphasis public affairs and public communication is a missed opportunity for DHS to validate its sizeable expenses and uses of taxpayer money. The ultimate question for a federal official remains: what have we gained from executing Eagle Horizon 2010? On the surface it appears the public has failed to learn anything about the drill or our national preparedness efforts.

Lastly, most national level or federally directed exercises maintain a certain degree of confidentiality either throughout the exercise or afterwards. This often only contributes to an inability to communicate with the public and other relevant emergency responders. “Many exercises are classified or have classified elements probably difficult to be examined by outsiders.”¹¹⁵ The lack of available information from which to plan future exercises or tailor present day response forces seems not only to impede communication, but also to waste the resources and efforts of so many involved.

¹¹⁴ Text of 2010 National Level Exercise EAGLE HORIZON by Daniel W. O’ Connor on May 24, 2010, on the Homeland Security Watch Blog, <http://www.hlswatch.com/index.php?s=where+is+candor>.

¹¹⁵ Ibid.

D. CONCLUSION

National level exercises continue to endure criticism for various reasons. The cumulative effect of high cost, low participation rates, inaccessible AARs and lessons learned, and a prohibitive communication architecture all supports the argument that bigger is not better. The direct relationship between the size of an exercise and the complexity involved in successfully administering, implementing and evaluating seems to create more vulnerabilities than can possibly be uncovered. The forward focus of the Department of Homeland Security and its subordinate entity, FEMA, should be to address working relationships all along the spectrum of emergency response and capabilities. Federal officials should stress engagement with lower local levels of government and assume a role more typical of a force enabler. In other words, big government should tackle national response efforts by providing what is needed to state, local and territorial personnel. An effort should be undertaken to standardize procedures for response, joint activities, data generation and reporting. The assumption that National Planning Scenarios are addressing our critical vulnerabilities is misguided. National endeavors train and qualify federal officials or political appointees to momentarily assume political responsibility during chaotic events. State and local governments should be charged with organizing and mitigating the specific effects of a catastrophic event relative to their AOR as our limited national resources must be closely guarded and responsibly deployed in order to increase America's national preparedness.

IV. CONCLUSION: THE DEPARTMENT OF HOMELAND SECURITY AND THE FUTURE

The Quadrennial Homeland Security Review Report (QHSRR), published in February 2010, serves as both a document intent on rallying efforts to secure the homeland while also highlighting shortfalls within DHS and its bureaucratic working relationships with partner agencies. The QHSRR focuses both on present day threats and the framework for American strategic response by emphasizing the Homeland Security Enterprise (HSE) in pursuit of stronger national security and improved response capability. Since appointment in 2009, Secretary Napolitano has ushered in a productive era at DHS in which she continues to focus on maturing and strengthening the (HSE). The goal of the HSE is to ensure a shared awareness and understanding of risks and threats, build capable communities, and create unity of effort to underpin our collective goals of preventing terrorism and enhancing our national security.¹¹⁶

The term “enterprise” refers to the collective efforts and shared responsibilities of Federal, State, local, tribal, territorial, nongovernmental, and private-sector partners—as well as individuals, families, and communities to maintain critical homeland security capabilities. It recognizes the diverse risks, needs, and priorities of these different stakeholders, and connotes a broad-based community with a common interest in the public safety and well-being of America and American society.¹¹⁷

Respective of the HSE, this thesis has sought out to gauge DHS’ historical public communications performance by analyzing two of its highest profile projects, the Homeland Security Advisory System (HSAS) and the National Exercise Program (NEP). As a result of extensive top-down federal control and regulation, both case studies within this thesis examined the extent to which Americans are unreceptive of threat warnings

¹¹⁶ Department of Homeland Security (U.S.) Quadrennial Homeland Security Review Report: A Strategic Framework for A Secure Homeland. Washington, D.C. 2010, 65.

¹¹⁷ Ibid., B-1.

and security based exercises. Considerable debate over the effectiveness of color-coded systems and large, all-encompassing security based exercises continues within both academic and government settings.

In this final chapter, we will first review the results of the cases examined in earlier chapters and then address how best to maintain the national will and commitment towards homeland security. Additionally, we will analyze the new direction of DHS exercises and how the shift from larger to smaller more frequent exercises can better benefit officials and responders at the state and local levels. This chapter will recommend that to reverse a culture of disinterest in homeland security affairs, DHS officials should embark on a public relations outreach program in order to clarify and more effectively translate the importance of homeland security efforts. In support of Secretary Napolitano's new exercise direction this chapter will further recommend that national level exercises must continually shift the focus for preparation and coordination from the federal to the state level and emphasis a state centric regional approach to emergency and crisis management.

In Chapter II, the HSAS was critiqued as a broad national system that has failed to resonate with the American public because its vague warnings and general threat information rarely apply outside of federal departments and agencies. A historical review of the evolution of the HSAS reveals a continuous evaluation process in which the entire response spectrum from local to national levels have recognized shortfalls and continually attempted to implement recommendations to improve public communication and interest in Homeland Security threats. As a result of vague warnings and indiscriminate color shifts before, during and after a terrorist attack or incident, the American public has lost confidence in risk-averse politically appointed government officials that undermine the credibility of the HSAS. Improved threat credibility and information transparency are vital for DHS to reengage the American community and restore public readiness to acceptable and sustainable levels. The HSAS remains a relevant and vital means for DHS officials to communicate with responders and the American public, yet, its general threat messages continue to dilute the importance of preparation and response during times of crisis. The HSAS, supported by both threat

advisories and information bulletins has been appropriately designed yet poorly executed. DHS officials must eliminate the green threat advisory level, as America's threat posture post 9/11 has never operated under low risk of terrorist attack. Additionally, the limited use of homeland security advisories and bulletins to communicate across all levels of government must be reemphasized in efforts to priorities concerns, threats, and response capabilities.

Chapter III examined the National Exercise Program (NEP) by addressing the significance of annual White House directed operations-based National Level Exercises (NLE) within the context of DHS's physical activity communication efforts. The central drawbacks to NLE remain a persistent focus on emergency scenarios that are unlikely to occur, an emphasis on federally directed activity, and an inability to communicate lessons learned security information to the public. In recognition that exercises are necessary to determine the appropriate balance of safety, security and capability, this chapter further argued that exercises have become increasingly complicated, costly, and unrealistic. The future success of NLEs is directly related to the value and responsibility assigned to regional and local level responders and officials. The decentralization of exercise regulation and the elimination of various bureaucratic obstacles to participation in larger federally driven exercise will contribute to an improved readiness posture across all levels of government and throughout American communities.

Secretary Napolitano's August 2010 National Exercise Program directive has revamped the manner and frequency in which we test our national capabilities and has created additional opportunities for federal organizations to incorporate state and local level responders. However, the current problems, which hinder both the Homeland Security Advisory System (HSAS) and the National Exercise Program (NEP) still persist and inhibit our nation's ability to respond to and recover from terrorist attacks and natural disasters. The HSAS is the premier verbal communication tool used by DHS to convey security threats and warnings, yet under its current structure it continues to lack the trust, confidence and interest of the American public. The NEP is the most effective and costly form of physical activity communication utilized by DHS yet as the provided

research has shown, it has become far too broad, complicated and federally driven to effectively incorporate and capitalize on the value of state and local level officials.

A. IMPROVING THE HSAS AND MAINTAINING THE NATIONAL WILL TO PROTECT AMERICA

The success of the HSE depends entirely on its strategic approach to security, which is reliant on shared security awareness among all stakeholders. DHS must reconnect with the American public in order to recapture the respect and genuine interests of citizens willing to contribute to national security. The collective efforts of American citizens is the key to building stronger communities, reducing security vulnerabilities, improving overall preparedness levels, and strengthening local level response to natural disasters and terrorist attacks.

Historical DHS communication with the American public via the HSAS has created a culture of disinterest due mainly to the repetitive generalization of threat information and warnings during times of crisis. One recommendation to overturn negative public perceptions of DHS and lessen the divide between federal and lower-level officials is for DHS to embark on a nationwide public relations outreach campaign. An outreach campaign focused on public communications would allow DHS officials to actively communicate security objectives and capabilities beyond bureaucratic government documents in order to better reveal and explain the focus of DHS, which is the third largest federal agency with over 200,000 American employees. A public relations outreach program comparable to any of the U.S. military services would create an environment for DHS officials to rationalize their seemingly inflated budgets and justify the growing costs and requirements necessary to secure the homeland. Imagine if the American public could one day become as interested and cognizant of DHS affairs as the American public has become to the exploits and service of the United States Marines. The Marines are successful because they promote a challenge to serve and fight on behalf of America. DHS must reinvent its image by challenging Americans defend America by serving in any of its various agencies.

High-level DHS officials should personally endorse the public relations outreach program by participating in public events, commercials, and exercises, though the names

and faces of its employees, as showcased on DHS.gov, should be utilized to communicate the message of the HSE. By using everyday government employees (which are our friends, neighbors, and relatives) to carry the message of enduring security, DHS officials can better substantiate and personalize threat warnings that may be more effective at relating to the American public. Incorporating non-executive DHS employees into an outreach program will also diminish the directive nature of large overarching federal bureaucracies. Everyday citizens working on behalf of DHS will be able to better humanize the responsibility and necessity of protecting the homeland while also educating the American public about the various agencies that comprise DHS.

An outreach program of this scope will allow DHS officials to effectively “call to duty” American citizens interested in protecting their country. This is an opportunity not only to educate the public on security concerns, but to also make DHS jobs and training more selective and competitive. The power of personalizing the roles that everyday Americans are playing in the defense of our ports, borders and airports must be showcased in efforts to continuously raise security awareness and honestly communicate with the American public.

At present, the American public only hears from DHS officials in times of crisis or threat. By taking the initiative and actively promoting the daily endeavors of DHS employees in defense of America, federal officials can begin to rebuild the trust, confidence, and integrity essential for public communication. DHS is often the scapegoat for security breaches and concerns yet its must not be viewed as another extraneous and expensive government agency. All efforts should be made to overturn the present day culture of disinterest, and the first step is refining what the message is and how it can be most effectively communicated to the average American citizen.

B. NATIONAL EXERCISE PROGRAM: DECENTRALIZED UNITY OF EFFORT

The past ten years of congressionally mandated National Level Exercises have only marginally improved American response capabilities to natural disasters and terrorist attacks. To relate the lack of catastrophic terrorist attacks on American soil to our improved awareness and capabilities would be unjustified, as our enemies remain in

attack mode and their recurring failures have largely been a result of their incompetence and faulty execution (Northwest Flight 253 Underwear Bomber, Times Square Bomber, Foiled European Plot). Historical evidence indicates that NLEs, while serving to test our response abilities, have more often than not revealed additional vulnerabilities. Many of these new found vulnerabilities stem from the inclusion of additional bureaucratic layers of government intervention and protocol. Heavy federal involvement continues to hinder state abilities to further coordinate among regional and local level officials. The NLE Program remains vital to our homeland defense, yet specifically it remains necessary solely for the training and development of high-level federal officials who are politically responsible to handle national emergencies as they occur.

The historical emphasis on federal management of national incidents has widened the divide between state/local level responders and authoritative federal entities. The NEP must continue to focus on the extent of federal authority and resources involved in security exercises while shifting the emphasis of training and response to the state level. Exercises of national importance should focus on an individual states' ability to respond and operate along the same guidelines used when a governor declares a state of emergency. In the event that a crisis or terrorist attack overwhelms a particular state and its capabilities, the next step in the process should involve a regional response agreement between bordering states vice national participation. A state should request national intervention during a crisis only when an event or scenario exceeds the capabilities of a state or actionable intelligence indicates that negative ramifications exist outside of state or regional control. A shift towards state focused training will ultimately improve national preparedness by enabling states to better conserve precious resources and manpower while also providing DHS an opportunity to focus on standardizing response capabilities through regional frameworks.

The August 2010 National Exercise Program directive issued by DHS Secretary Napolitano serves to increase the number and frequency of smaller exercise yet still functions under the premise of federal control and regulation. The same recurring exercise issues will resurface regardless of the number of exercise scheduled, stated objectives, or the volume of participants evaluated. Under a federally dominated system,

state and local level responders will encounter difficulty as planning will always be costly, untimely, directive and unsatisfying to the various objectives of each nonfederal participant. The QHSRR calls for efforts to institutionalize homeland security planning as current planning systems address only portions of overall homeland security activities, and require better integration across all levels of government with intergovernmental entities.¹¹⁸ Additional recommendations call for the implementation of best practices across the HSE in stark recognition that despite ten years of NLE experience, the homeland security apparatus has yet to devise a means or establish an overarching authority capable of implementing lessons learned to address security vulnerabilities.¹¹⁹

In order to achieve a secure and protected homeland, DHS must produce a common operating picture without over-regulating state activities and response capabilities. Response efforts remain local events and the most efficient way to coordinate capabilities to prevent, protect against, respond to, and recover from all hazards in a way that balances risk with resources and need is to return power and discretion to the state level with federal resources on demand and minimize political influence within the process of defending the homeland.¹²⁰

C. CONCLUSION

In conclusion, to alleviate the historically poor performance of public communications, the Department of Homeland Security should focus its efforts on revamping the Homeland Security Advisory System (HSAS) and the National Exercise Program (NEP). To date, DHS has not been able to earn the respect of the public or local officials, and that means that many Americans are not paying attention to important threat warnings and security based exercises. This ultimately means our homeland security is suffering and American citizens remain vulnerable to future terror attacks. The security

¹¹⁸ Department of Homeland Security (U.S.) Quadrennial Homeland Security Review Report: A Strategic Framework for A Secure Homeland. Washington, D.C. 2010, 72.

¹¹⁹ Department of Homeland Security (U.S.) Office of Inspector General. DHS Efforts To Address Lessons Learned in the Aftermath of Top Officials Exercises. Washington, D.C. 2009, 1.

¹²⁰ Department of Homeland Security (U.S.) National Preparedness Guidelines. Washington, D.C. 2007, 1.

of the homeland remains vulnerable as both high profile programs lack consistent public interest and engagement. As a result of highly centralized federal management and execution, both programs continually fail to convey the importance of federal efforts to local levels of government and American citizens. The strength of America and our core capability to react and respond to terror attacks and natural disasters resides with the least influential working class Americans who protect our homes, schools, neighborhoods, and communities. I find that both programs are useful and necessary, but both can be improved by decentralizing the national exercise framework and communication efforts to local level officials who can better tailor information and response efforts pertinent to their communities. As the most important component of disaster relief and response, local level officials, who are typically overshadowed by national level personnel, can more effectively utilize federal exercise money and communicate threats to the American public than DHS personnel can.

LIST OF REFERENCES

- Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction (Gilmore Commission), "Forging America's New Normalcy: Securing Our Homeland, Protecting Our Liberty," Fifth Annual Report to Congress (Arlington, Va.: RAND Corporation, December 15, 2003), D-7-2.
- Arnold, A. G., DiPietro, G. R., Mucha, T. L., Schaffer, C. W., Sadowski, A. M., Sigamoney, R. S., Sinex, C. H., Smith, W.F. "Analysis of Communications Effectiveness for First Responders During TOPOFF 2000." The Johns Hopkins University: Joint Warfare Analysis, 2000. No.: JWR-00-016.
- Bellavita, April 6, 2010. "Does the Nation Need a National Level Exercise Program?," Homeland Security Watch Blog, <http://www.hlswatch.com/2010/04/06/does-the-nation-need-a-national-level-exercise-program>.
- Council for Excellence in Government. "Are We Ready? Introducing the Public Readiness Index: a survey-based tool to measure the preparedness of individuals, families and communities." Washington, D.C. 2006.
- Department of Homeland Security. Office of Inspector General. Office of Inspections and Special Reviews. A Review of the Top Officials 3 exercise. Washington, D.C. 2005.
- . Homeland Security Exercise and Evaluation Program Volume 1, Overview and Doctrine. Washington, D.C.: U.S. Dept. of Homeland Security, Office for Domestic Preparedness, 2003.
- . Homeland security exercise and evaluation program. Volume 2, Exercise Evaluation and Improvement. Washington, D.C: U.S. Dept. of Homeland Security, Office for Domestic Preparedness, 2003.
- . Brief documentary history of the Department of Homeland Security, 2001-2008. Washington, D.C, 2008.
- . Quadrennial homeland security review report: A Strategic Framework for a Secure Homeland. Washington, D.C: U.S. Department of Homeland Security, 2010.
- "FEMA-Suspended TOPOFF Exercise Replaced by National Level Exercise, Tier 1," Suburban Emergency Management Project (SEMP), BIOT Report # 636, July 20, 2009, http://www.semp.us/publications/biot_reader.php?BiotID=636.
- Flynn, Stephen E., "Color Me Scared," New York Times, May 25, 2005.

- Goldstein, M. L. Emergency Preparedness Improved Planning and Coordination Necessary for Development of Integrated Public Alert and Warning System. Testimony before the Subcommittee on Economic Development, Public Buildings, and Emergency Management, Committee on Transportation and Infrastructure, House of Representatives. U.S. Govt. Accountability Office. Washington, D.C. 2009.
- Graham, B., and Talent, J. M., "Prevention of WMD Proliferation and Terrorism Report Card. An Assessment of the U.S. Government's Progress in Protecting the United States from Weapons of Mass Destruction Proliferation and Terrorism," Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism (U.S.) 2010.
- "Homeland Security Advisory Council Charter," February 2009, http://www.dhs.gov/xlibrary/assets/HSAC_Charter.
- "Homeland Security Advisory System," Homeland Security Presidential Directive 3, March 11, 2002, <http://www.whitehouse.gov/news/releases/2002/03/20020312-5.html>.
- Homeland Security Council (U.S.). Homeland Security Advisory System Task Force Report and Recommendations. Washington, D.C.: 2009.
- . 2009. National Planning Scenarios: Executive Summaries. Washington, D.C. 2005.
- Hsu, Spencer S., "Disaster Drills' Future May Be Put to The Test; National Exercises Could Be Scaled Back," The Washington Post, April 2, 2010.
- Inglesby, Thomas V. "Observations from the Top Off Exercise." Public Health Reports, Vol. 116, Supplement 2 (2001).
- Kemp, Roger L. "Homeland Security: Common Sense Measures to Safeguard Your Community," Fire and Arson Investigator, 2009.
- Markle Foundation Task Force. Nation At Risk: Policy Makers Need Better Information to Protect the Country. New York: Markle Foundation. 2009.
- Mental Health Service Administration. Communicating in a Crisis Risk Communication Guidelines for Public Officials. Rockville, MD: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, 2002.

- Mintz, John., "DHS Considers Alternatives To Color-Coded Warnings." The Washington Post, May 10, 2005. O' Connor, May 24, 2010. "Where is Candor?," Homeland Security Watch Blog, <http://www.hlswatch.com/index.php?s=where+is+candor>.
- Napolitano, Janet, "Internal Memorandum by Secretary of Homeland Security Regarding the National Exercise Program," August 17, 2010.
- Office of State and Local Government Coordination Preparedness (SLGCP). Capabilities Based Planning Overview 12–17. (Washington, D.C: U.S. Dept. of Homeland Security, 2004).
- Perini, Michael B. Public Communications: Vital Link to Maintaining the Public's Trust During Crisis. PhD Dissertation, U.S. Army War College, 2006.
- Perrow, Charles. "The Disaster after 9/11: The Department of Homeland Security and the Intelligence Reorganization." Homeland Security Affairs II, no. 1 (April 2006).
- Petersen, R. E., Lindsay, B. R., Kapp, L., Liu, E. C., and Peterman, D. R. Homeland Emergency Preparedness and the National Exercise Program: Background, Policy Implications, and Issues for Congress. Ft. Belvoir: Defense Technical Information Center, 2008.
- Phillips, Zach. "Emergency Preparedness Exercises Remain an Imperfect Science." GovernmentExecutive.com, (Nov 2006).
- President's Homeland Security Advisory Council (U.S.). Top Ten Challenges Facing The Next Secretary of Homeland Security. Washington, DC: U.S. Dept. of Homeland Security, 2008.
- Progress in Federal Incident Management Planning. (Washington, D.C: U.S. Department of Homeland Security Office of Inspector General, 2010).
- Reddick, Christopher G. "Homeland Security Preparedness and Planning in US City Governments: A Survey of City Managers." Journal of Contingencies & Crisis Management 15, no. 3 (September 2007): 157–167.
- Reese, S. "Homeland Security Advisory System Possible Issues for Congressional Oversight." Washington, D.C: Congressional Research Service, Library of Congress, 2005.
- Ridge, Tom "Remarks by Secretary of Homeland Security Tom Ridge Regarding Recent Threat Reports," August 1, 2004.

Shapiro, Jacob N and Cohen, Dara Kay. "Color Bind: Lessons from the Failed Homeland Security Advisory System." *International Security*, 32 (2), Fall 2007.

United States. Quadrennial Homeland Security Review Report: A Strategic Framework for A Secure Homeland. (Washington, D.C: U.S. Department of Homeland Security, 2010).

———. 2003. Homeland Security Exercise and Evaluation Program Volume 1, Overview and doctrine. Washington, D.C.: U.S. Dept. of Homeland Security, Office for Domestic Preparedness.

———. DHS Efforts To Address Lessons Learned in the Aftermath of Top Officials Exercises. (Washington, D.C: U.S. Department of Homeland Security Office of Inspector General, 2009).

———. National Preparedness Guidelines. (Washington, D.C: U.S. Department of Homeland Security, 2007).

U.S. Congress. Emergency Preparedness Improved Planning and Coordination Necessary for Modernization and Integration of Public Alert and Warning System: Report to the Subcommittee on Economic Development, Public Buildings, and Emergency Management, Committee on Transportation and Infrastructure, House of Representatives. Washington, D.C: U.S. Govt. Accountability Office, 2009.

———. Emergency Warning Systems: Ways to Notify the Public in the New Era of Homeland Security: Hearing of the Subcommittee on Emergency Preparedness and Response before the Select Committee on Homeland Security, House of Representatives, One Hundred Eighth Congress, second session, September 22, 2004. Washington: U.S. G.P.O, 2006.

———. Practicing like we play: Examining Homeland Security Exercises: Hearing Before the Subcommittee on Emergency Communications, Preparedness and Response of the Committee on Homeland Security, House of Representatives, One Hundred Tenth Congress, first session, October 3, 2007. Washington: U.S. G.P.O., 2009.

Wray, R. J., Kreuter, M. W., Jacobsen, H., Clements, B., and Evans, R. G. Theoretical Perspectives on Public Communication Preparedness for Terrorist Attacks. Emmitsburg, MD: National Emergency Training Center, 2004.

Yim, R. A. Homeland Security Risk Communication Principles May Assist in Refinement of the Homeland Security Advisory System. Testimony, GAO-04-538 T. (Washington, D.C: U.S. General Accounting Office, 2004).

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California